LABKOVSKIY, YA. M.

USSR/Physics Oct 48
Liquids, Supercooled
Crystallization

"The Formation of Centers of Crystallization in Supercooled Liquids," V. I. Danilov, O. D. Kozachkovskiy, Ya. M. Labkovskiy, Inst of Metallophys, TsNII of Ferrous Metal, 6 3/4 pp

"Zhur Eksper i Teoret Fiz" Vol XVIII, No 10

Investigates process of activating impurities in salol. Discusses experimental relationships from standpoint of formation of molecular contact between two solids. Submitted 10 Apr 48/

PA 19/49T103

LABKOVSKIY, Ya. M.

30

PHASE I BOOK EXPLOITATION SOV/5469

Soveshchaniye po kriticheskim yavleniam i flyuktuatsiyam v rastvorakh. Moscow, 1960.

Kriticheskiye yavleniya i flyuktuatsii v rastvorakh; trudy soveshchaniya, yanvar' 1960 g. (Critical Phenomena and Fluctuations in Solutions; Transactions of the Conference, January 1960) Moscow, Izd-vo AN SSSR, 1960. 190 p. 2,500 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova. Khimicheskiy fakul'tet.

Responsible Ed.: M. I. Shakhparonov, Doctor of Chemical Sciences, Professor; Ed. of Publishing House: E. S. Dragunov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE: This collection of articles is intended for scientific personnel concerned with chemistry, physics, and heat power engineering.

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Critical Phenomena and Fluctuations SOV/5469

COVERAGE: The book contains 24 of the 26 reports read at the Conference on Critical Phenomena and Fluctuations in Solutions organized by the Chemical Division of Moscow State University, January 26-28, 1960. The reports contain results of investigations carried out in recent years by Soviet physicists, chemists, and heat power engineers. The Organizing Committee of the Conference was composed of Professor Kh. I. Amirkhanov, A. Z. Golik, I. R. Krichevskiy (Chairman), V. K. Semenchenko, A. V. Storonkin, I. Z. Fisher, and M. I. Shakhparonov (Deputy Chairman). References accompany individual articles.

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AVAILABLE: Library of Congress (QD545.S73)

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10-28-61

Card 9/9

LABKOVSKIY, YA. M.

27593. DANILOV, V. I., KOZACHKOVSKIY, O. D., i LABKOVSKIY, YA. M. Aktivatsiya primesey v salole. /Voprosy Kristallizatsii./ V sb: Problemy metallovedeniya i fiziki metallov m., 1949, s. 70-79.

SO: Letopis' Zhurnal'nykh Statey, Vol. 37, 1949

LABKOVSKIY Ya. M.

DANILOV, V.I.; KOZACHKOVSKIY, O.D., kand.fiz.-mat.nauk; LABKOVSKIY, Ya.M.

Activation of impurities in salol. Probl.metalloved.i fiz. met. no.[1]:70-79 '49. (MIRA 11:4)

1.Laboratoriya kristallizatsii TSentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii. 2. Chlen-korrespondent AN USSR (for Danilov).

(Salol) (Activity coefficients)

MOKHOV, N.V.; LABKOVSKIY, Ya.M.

X-ray diffraction study of the isothermal compressibility of ether and benzene. Ukr. fiz. zhur. 7 no.8:816-820 S '62. (MIRA 16:1)

1. Dnepropetrovskiy universitet.
(X rays—Diffraction) (Ether) (Benzene)

MOKHOV, N.V.; LABKOVSKIY, Ya.M.

Fluctuant formations in ether and benzene and their variation with temperature. Ukr. fiz. zhur. 9 no.5:465-470 My '64. (MIRA 17:9)

1. Dnepropetrovskiy gosudarstvennyy universitet.

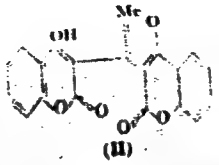
PURIN', B. [Purins, B.] (Riga); LABLAIKS, G. (Riga); BUZHINSKA, V. (Riga)

Electrodeposition of zinc from acid ammonium chloride electrolytes. Vestis Latv ak no.2:123-128 '60. (EEAI 10:1)

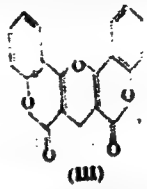
1. Akademiya nauk Latviyskoy SSR, Institut khimii.
(Zinc) (Amonium chloride) (Electrolytes)

CA

Anticoagulants. XII. Synthetic proof of the constitution of 3-[coumarino-(3",4":3',2')-5'-methyl-4'-furanyl]-4-hydroxycoumarin. Karel Pufík and Ludvík Labler (Pharm. Biochem. Research Inst., Prague, Czech.). *Chem. Listy* 45, 490–9(1951); cf. *ibid.* 484, 488; *C.A.* 45, 10245f—Synthetically prepd. *1,1-bis(4-hydroxy-3-coumarinyl)-2-propanone* (I) treated with CH_2N_2 gave the *di-Me ether*, m. 164° (from EtOH or 70% AcOH). I refluxed with H_2SO_4 in AcOH yielded 77.5% *3-[coumarino-(3",4":3',2')-5'-methyl-4'-furanyl]-4-hydroxycoumarin* (II), m. 295° [*Et₄NH salt*, m. 236–7° (from EtOH)], also obtained m. 300° by refluxing I with $SOCl_2$. II with Ac_2O gave the *4-acetate*, m. 282° (from Me_2CO), also obtained by refluxing I with Ac_2O. *4-Acetyldicoumarino(3',4':3,2;3",4":5,6)pyran* (III), m. 305° (from cyclohexanone), was isolated as a by-product in the anhydrization of I either with $SOCl_2$ or Ac_2O. I with Ac_2O in a C_5H_5N at room temp. gave *1,1-bis(4-acetoxy-3-coumarinyl)-2-acetoxypropene* (IV), m. 189° (from EtOH). A heating of IV, m. 177° (from EtOH), was obtained when $(EtCO)_2O$ was used instead of Ac_2O. IV was transformed to III, m. 301°, and to the *enol acetate* (V) of III, m. 269° (from pyridine), by boiling with dil. AcOH. V was also obtained from IV by heating in vacuo at 180–190° and gave III with cold H_2SO_4. The *enol propionate* of III, m. 247–8° (from C_5H_5N), was obtained analogously from the *propionyl analog* of IV. The oxime of III, m. 251° (from dil. C_5H_5N) was prepd. from III or from the di-Me deriv. of I by refluxing with $NH_2OH.HCl$ in C_5H_5N. Prepn. of I: 4-Hydroxycoumarin (5.8 g.) dissolved in 640 ml. boiling water and boiled 30 min. with 3.6 g. AcCH:NOH in 36 ml. H_2O deposited 4 g. I in crystals, m. 240° (from AcOH); *Et₄NH salt*, m. 198° (from EtOH). XIII. Synthesis of 1,1-bis(4-hydroxy-3-coumarinyl)-2-propanone. K. Pufík and St. Kořistek. *Ibid.* 503–4.—1,1-Bis(4-hydroxy-3-coumarinyl)-2-propanone was synthesized by treating the salts of 4-hydroxycoumarin (I) with $ClCH_2Ac$ (II) under various conditions and subjecting the reaction mixt. to paper chromatography. The best yields were obtained by refluxing the K salt of I in water with II. The reaction required prolonged heating or a higher temp. when carried out in EtOH. M. Hudlický



(II)



(III)

SORM, F.; LABLER, L.; CERNY, V.

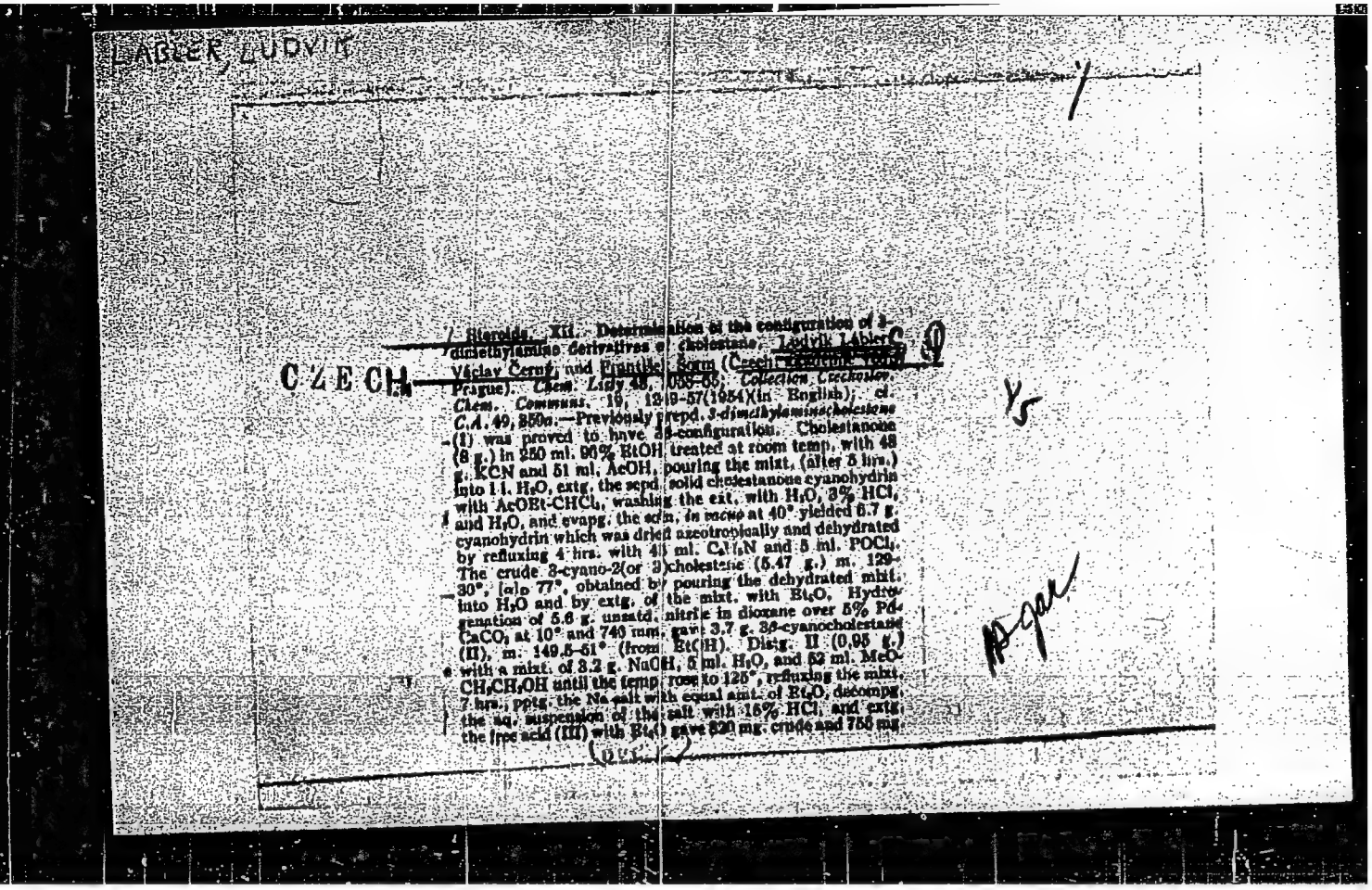
Steroids. Part 6. 3-dimethyloamino derivatives of steroids [in Russian with summary in English]. Sbor.Chekh.khim.rab. 18 no.6:842-853 D '53. (MLRA 7:6)

1. Department of Natural Products, Institute of Organic Chemistry, Czechoslovak Academy of Science, Prague. (Steroids)

LABLER, L.

SORM, F., LABLER, L., CERNY, V.
"Steroids. Part 6. Steroid 3-Dinethyla-Mino-Derivatives," p. 418.
(Chemicke Listy, Vol.47, No.3, Mar. 1953, Praha.)

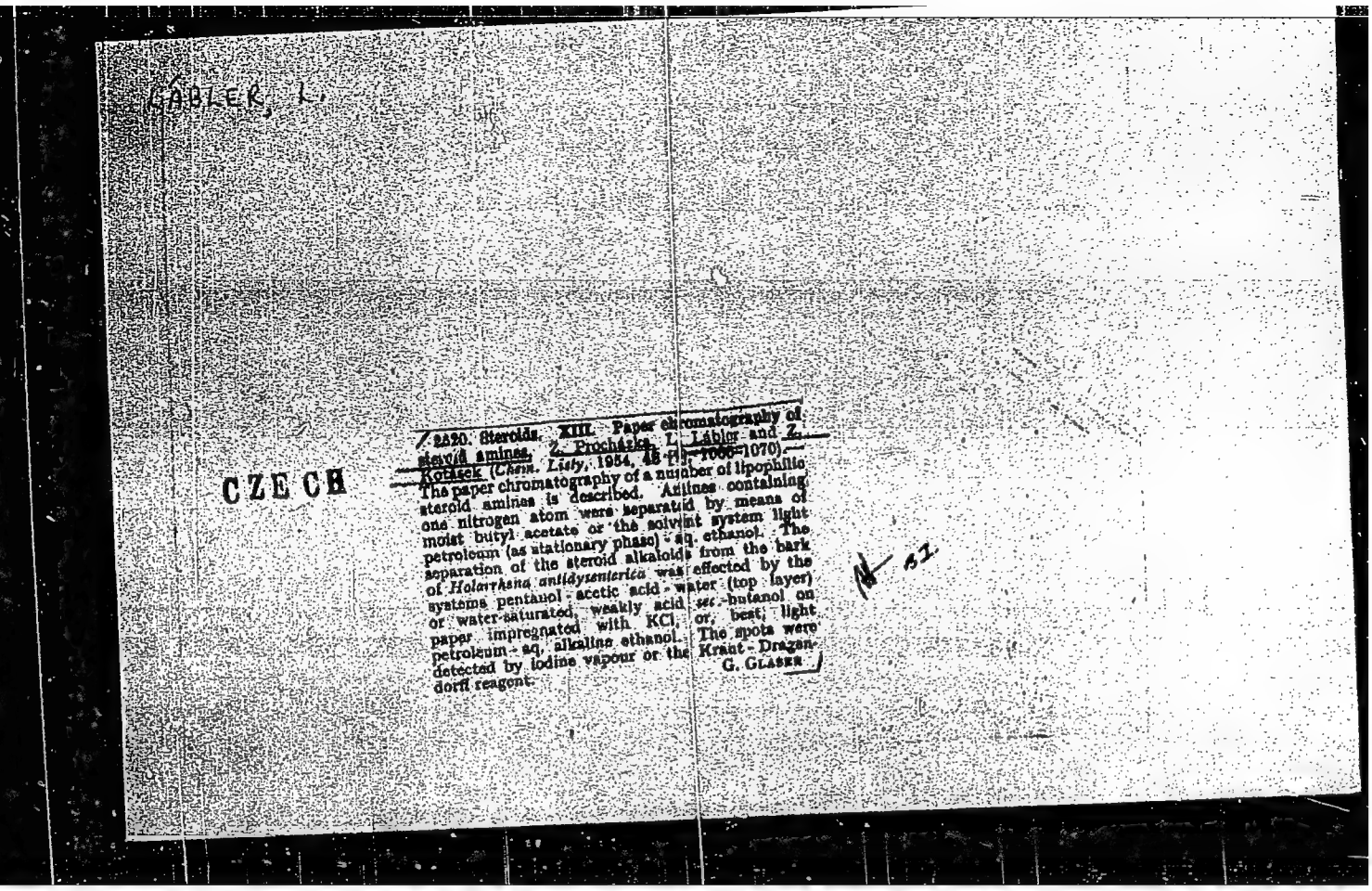
SO: Monthly List of East European Accessions, Vol.2, No.9, Library of Congress, September 1953, Uncl.



LABLER, LUDVIK

C 4 E CH

Steroids. XII. Determination of the configuration of 3-dimethylamino derivatives of cholestane. Ludvik Labler, Václav Černý, and František Šorm (Czech Academy of Sciences, Prague). *Chem. Listy* 48, 1053-65; *Collection Czechoslov. Chem. Communs.* 19, 1249-57(1954)(in English); cf. *C.A.* 49, 350a.—Previously prepd. *3-dimethylaminocholestane* (I) was proved to have 3β-configuration. Cholestanone (8 g.) in 250 ml. 96% EtOH treated at room temp. with 48 g. KCN and 51 ml. AcOH, pouring the mixt. (after 5 hrs.) into 1 l. H_2O, extg. the sepd. solid cholestanone cyanohydrin with AcOEt-$CHCl_3$, washing the ext. with H_2O, 3% HCl, and H_2O, and evapg. the soln. *in vacuo* at 40° yielded 6.7 g. cyanohydrin which was dried azeotropically and dehydrated by refluxing 4 hrs. with 45 ml. C_5H_5N and 5 ml. $POCl_3$. The crude 3-cyano-2(or 3)cholestene (5.47 g.) m. 129-30°, $[\alpha]_D$ 77°, obtained by pouring the dehydrated mixt. into H_2O and by extg. of the mixt. with Et_2O. Hydrogenation of 5.6 g. unsatd. nitrile in dioxane over 5% Pd-$CaCO_3$ at 10° and 740 mm. gave 3.7 g. 3β-cyanocholestane (II), m. 149.5-51° (from Et(H). Distg. II (0.95 g.) with a mixt. of 3.2 g. NaOH, 5 ml. H_2O, and 52 ml. MeO-CH_2CH_2OH until the temp. rose to 125°, refluxing the mixt. 7 hrs., ppts. the Na salt with equal amt. of Et_2O, decomps. the aq. suspension of the salt with 15% HCl, and extg. the free acid (III) with Et_2O gave 820 mg. crude and 750 mg.

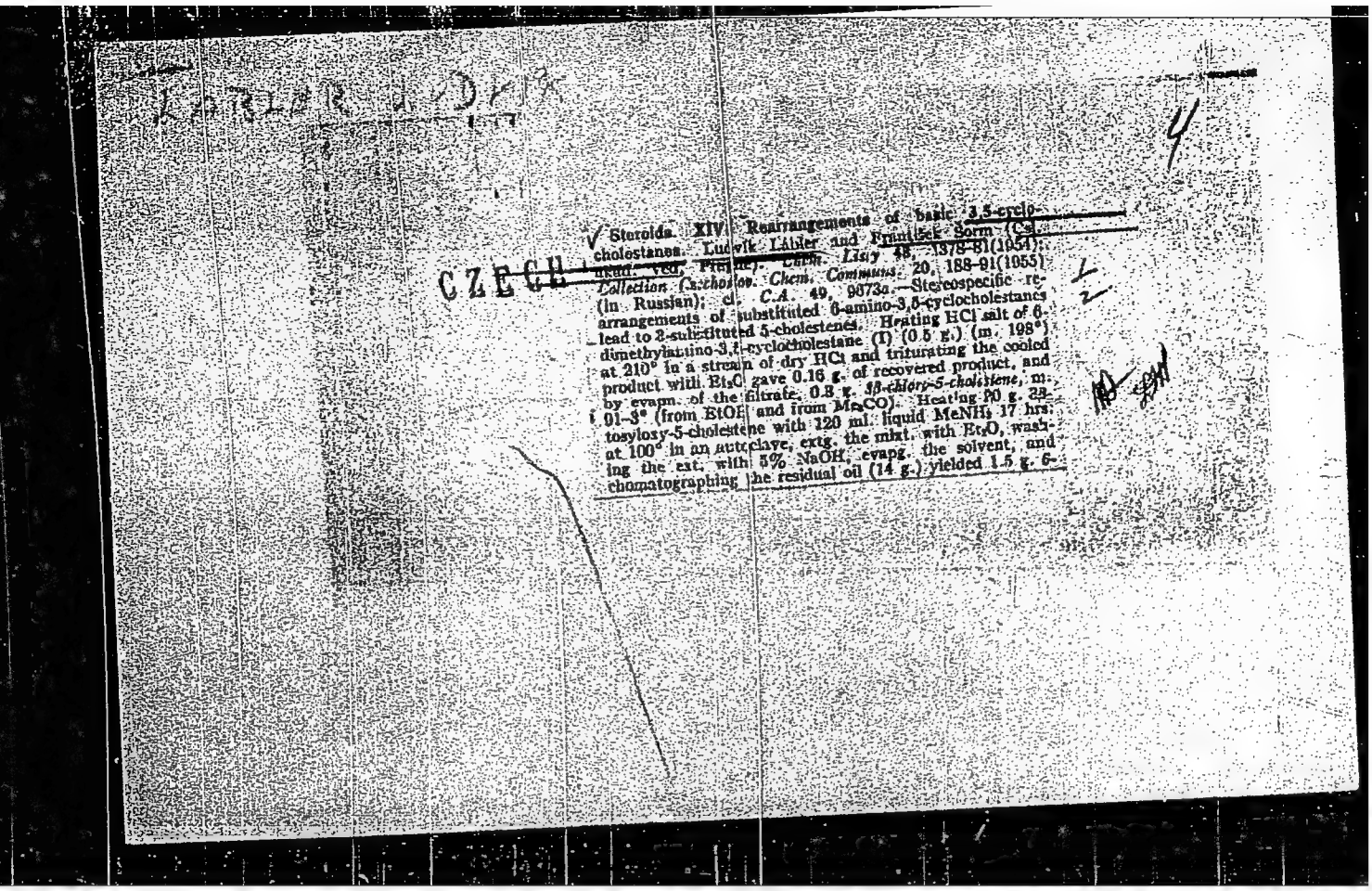


GABLER, J.

CZECH

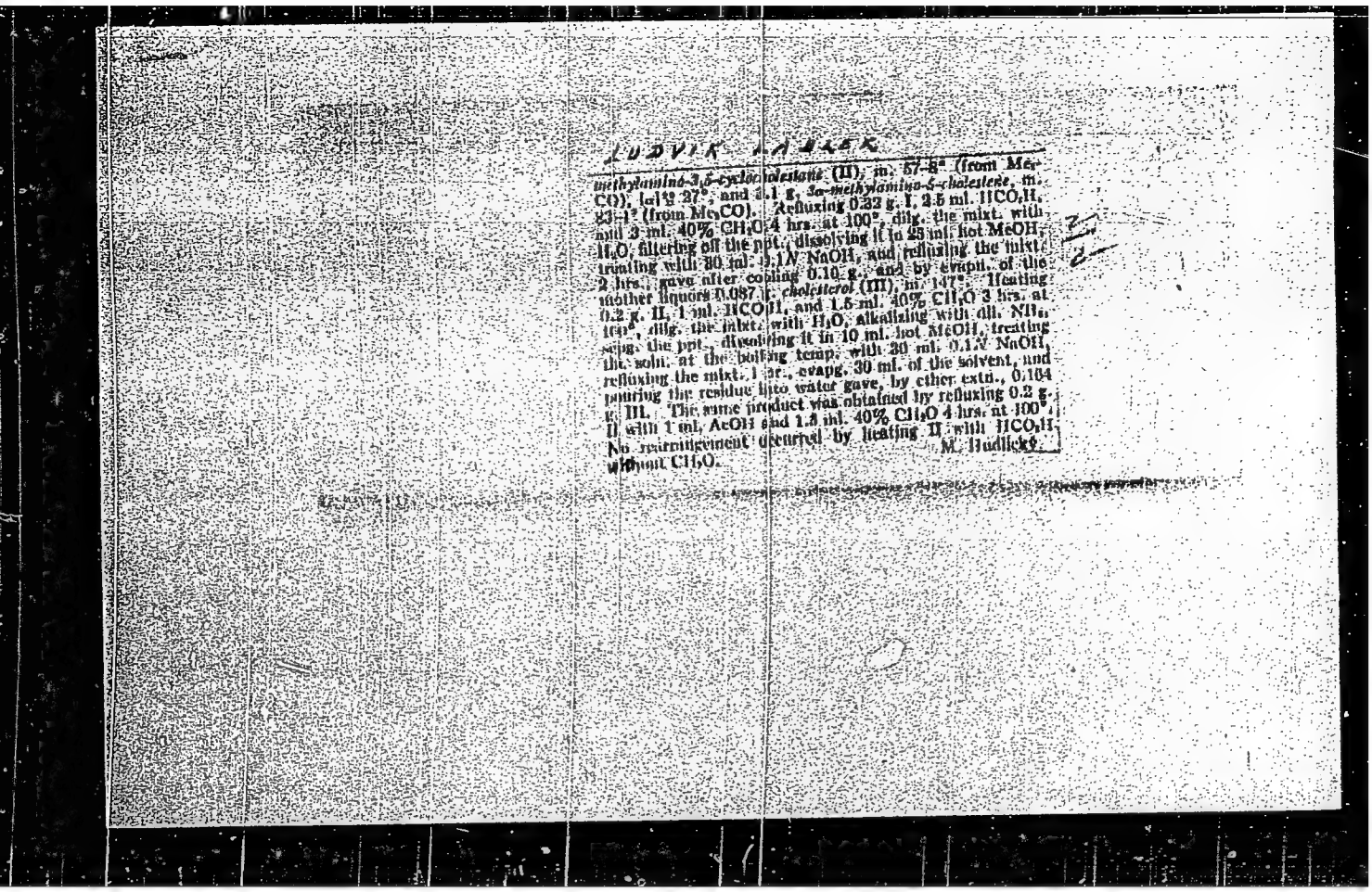
2820. Steroids. XIII. Paper chromatography of steroid amines. Z. Procházka, L. Labler and Z. Kotásek (*Chem. Listy*, 1954, 48 [8], 1065–1070).—The paper chromatography of a number of lipophilic steroid amines is described. Amines containing one nitrogen atom were separated by means of moist butyl acetate or the solvent system light petroleum (as stationary phase) – aq. ethanol. The separation of the steroid alkaloids from the bark of *Holarrhena antidysenterica* was effected by the systems pentanol – acetic acid – water (top layer) or water-saturated, weakly acid *sec*-butanol or, best, light petroleum – aq. alkaline ethanol. The paper impregnated with KCl. The spots were detected by iodine vapour or the Kraut – Dragendorff reagent.

G. GLASER



CZECH

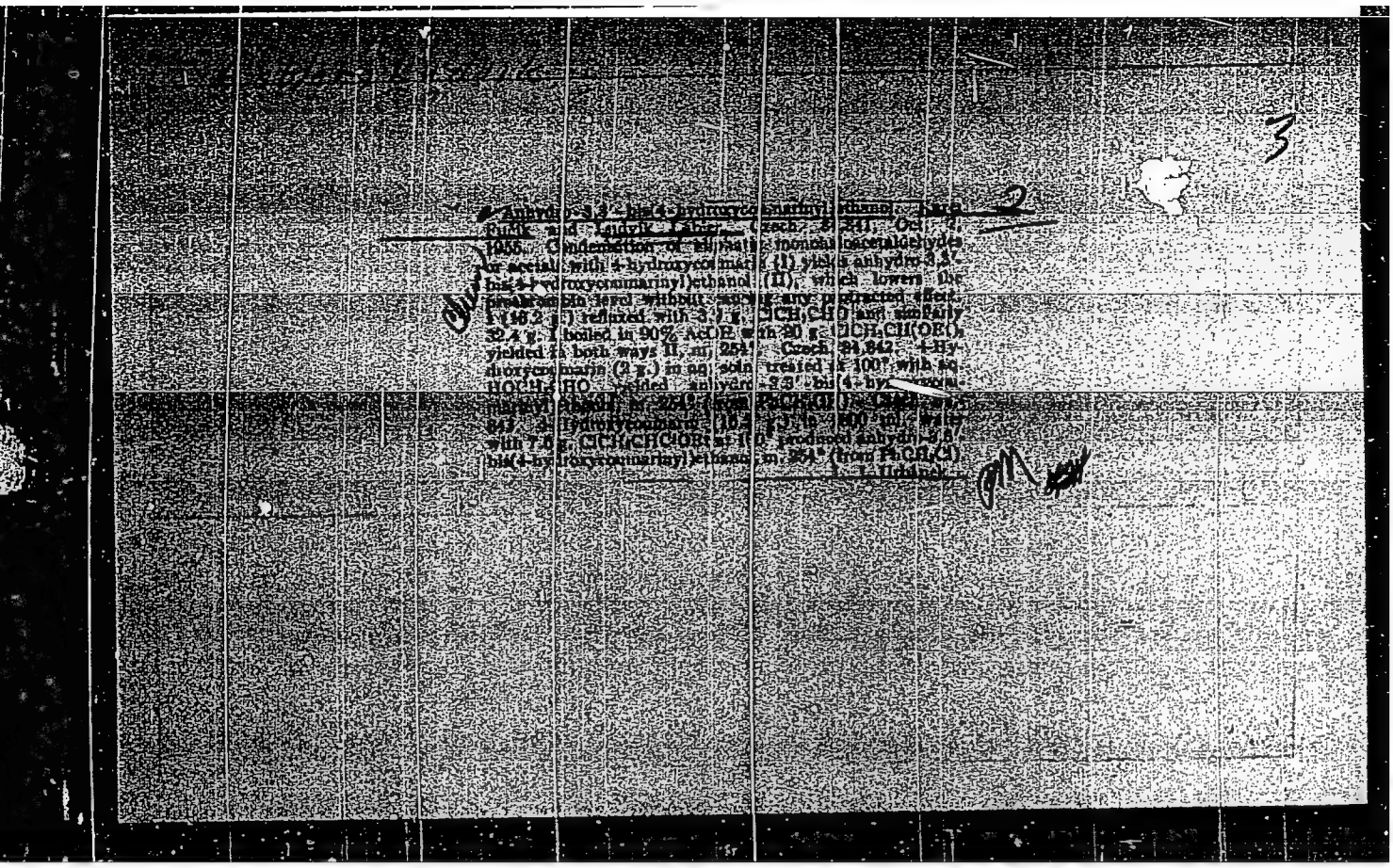
√ Steroids. XIV. Rearrangements of basic 3,5-cyclocholestanes. Ludwik Labler and Frantisek Sorm (Czech. Akad. Ved, Prague). *Chem. Listy* 48, 1378-81(1954); *Collection Czechoslov. Chem. Communs.* 20, 188-91(1955) (in Russian); cf. *C.A.* 49, 9873a.—Stereospecific rearrangements of substituted 6-amino-3,5-cyclocholestanes lead to 3-substituted 5-cholestenes. Heating HCl salt of 6-dimethylamino-3,5-cyclocholestane (I) (0.5 g.) (m. 198°) at 210° in a stream of dry HCl and triturating the cooled product with Et_2O gave 0.16 g. of recovered product, and by evapn. of the filtrate, 0.3 g. *3β-chloro-5-cholestene*, m. 91–3° (from EtOH and from Me_2CO). Heating 0.9 g. 3β-tosyloxy-5-cholestene with 120 ml. liquid $MeNH_2$ 17 hrs. at 100° in an autoclave, extg. the mixt. with Et_2O, washing the ext. with 5% NaOH, evapg. the solvent, and chromatographing the residual oil (1.4 g.) yielded 1.5 g. 6-

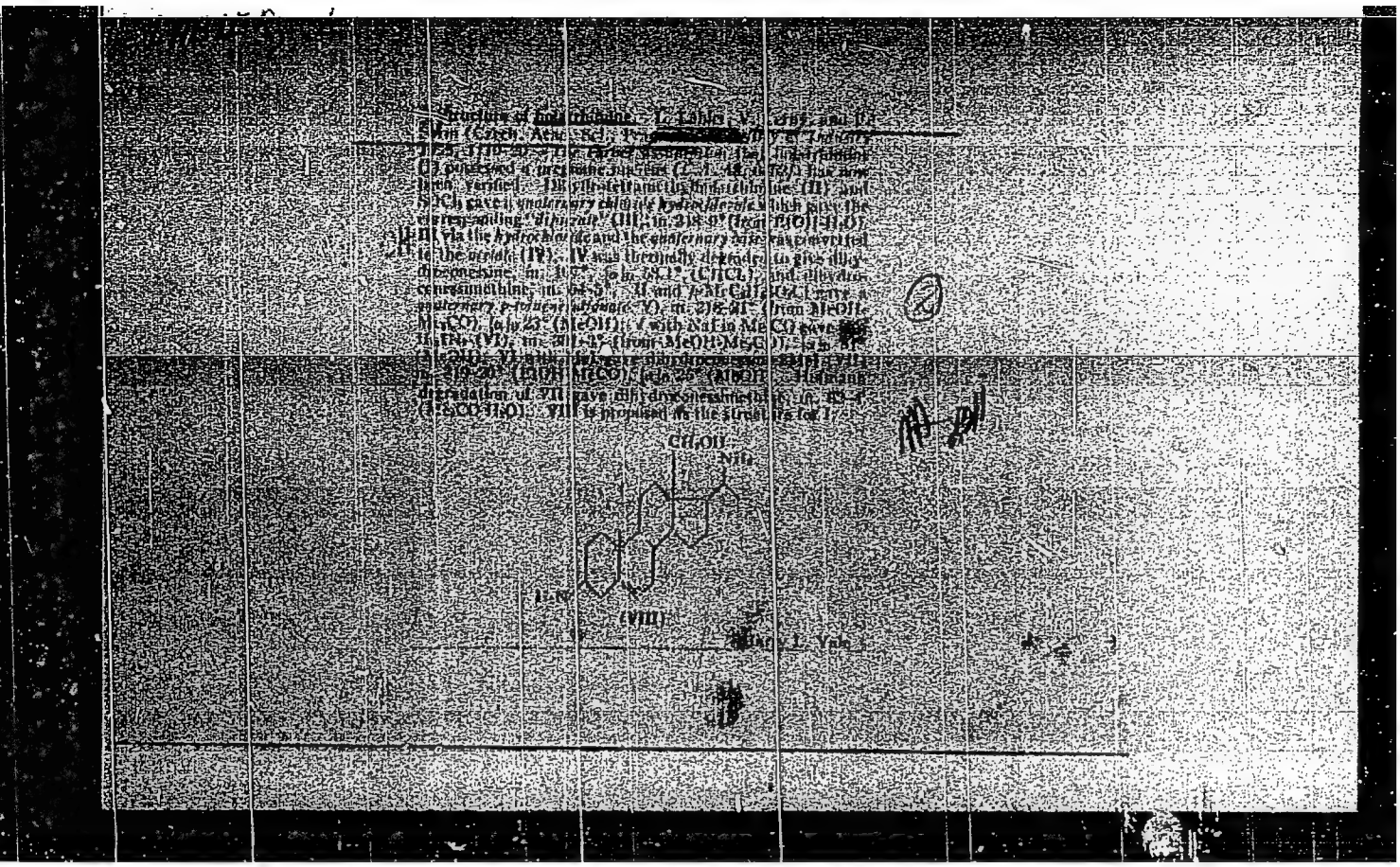


LUDVIK HORAK

methylamino-3,6-cyclocholestane (II), m. 57.8° (from Me$_2$CO), $[\alpha]_D^{22}$ 27°, and 3.1 g. *3α-methylamino-5-cholestene*, m. 83–4° (from Me$_2$CO). Refluxing 0.32 g. I, 2.5 ml. HCO$_2$H, and 3 ml. 40% CH$_2$O 4 hrs. at 100°, dilg. the mixt. with H$_2$O, filtering off the ppt., dissolving it in 25 ml. hot MeOH, treating with 30 ml. 0.1*N* NaOH, and refluxing the mixt. 2 hrs., gave after cooling 0.10 g., and by evapn. of the mother liquors 0.087 g. *cholesterol* (III), m. 147°. Heating 0.2 g. II, 1 ml. HCO$_2$H, and 1.5 ml. 40% CH$_2$O 3 hrs. at 100°, dilg. the mixt. with H$_2$O, alkalizing with dil. NH$_4$OH, evapg. the ppt., dissolving it in 10 ml. hot MeOH, treating the soln. at the boiling temp. with 30 ml. 0.1*N* NaOH, refluxing the mixt. 1 hr., evapg. 30 ml. of the solvent, and pouring the residue into water gave, by ether extn., 0.184 g. III. The same product was obtained by refluxing 0.2 g. II with 1 ml. AcOH and 1.5 ml. 40% CH$_2$O 4 hrs. at 100°. No rearrangement occurred by heating II with HCO$_2$H without CH$_2$O.

M. Hudlický





LABLER, L.; SORM, F.

Steroids. XIV. Rearrangement of basic 3, 5-cyclocholestanes. In Russian. p. 188

Vol. 20. no. 1, Feb. 1955
SBORNIK CHEKHOSLOVATSKIKH KHIMICHESKIKH RABOT
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, April 1956

LÁBLER, LUDOVÍK

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and Their Synthetic Analogues. E-3

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 26968.

Author : Lábler, Ludovík; Černý, Václav; Šorm, František.
Inst :
Title : Steroids. XIX. Proof of Structural Connection between Holarrhimine and Conessine.

Orig Pub: Sb. chekhosl. khim. rabot, 1955, 20, No. 6, 1484 - 1489; Chem. listy, 1955, 49, No. 9, 1389 - 1394.

Abstract: It was shown by the conversion of dihydrotetramethylholarrhimine (I) into derivatives of conessine that holarrhimine (III) has a steriod skeleton with a 3 β-amino group. This experimentally proved the assumption (see Siddiqui S., Pros. Ind. Acad., 1936, A3, 249; RZhKhim, 1954,

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Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 26968

benzene extracts 164 mg of 5,6-dihydroconessimethine (VI), melting point 64 to 65° (from aqu. acetone), and ether extracts 155 mg of dihydroconessine (VII), melting point 107° (from acetone), $/\alpha/^{20}D$ +51.8° (c 3.3, in chlorof.). 805 mg of n-toluene sulfonate of monomethyldihydroconessine (VIII), melting point 218 to 221° (from acetone-CH_3OH), $/\alpha/^{20}D$ +23° (c 2.6; in CH_3OH, is obtained after leaving 1 g of I staying in 80 ml of pyridine with 490 mg of n-toluenesulforchloride for 12 hours, following evaporation in vacuum until dry, neutralization of the aqueous solution of the residue with 500 mg of

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and Their Synthetic Analogues. E-3

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 26968.

$KHCO_3$, and extraction with $CHCl_3$. 923 mg of VII is boiled 30 min with 270 mg of NaI in 130 ml of acetone, 750 mg of monoiodomethylate of VII (VIIa) is obtained, melting point 302 to 304° (from acetone-CH_3OH), $[\alpha]_D$ +31° (c 2.7; in CH_3OH). By boiling 750 mg of VIIa with 1.3 ml of CH_3I and 10 ml of CH_3OH for 0.5 hour, 735 mg of diiodomethylate of VII (IX) is received, melting point 319 to 320° (from alc.-acetone), $[\alpha]^{20}_D$ +25° (c 3.0; in CH_3OH). 90 mg of VI (washed out with benzene) are obtained from 735 mg of IX by splitting according to Hoffmann and chromatographing with Al_2O_3. The infrared spectra of the obtained substances are attached. See RZhKhim, 1956. 71799 for report XVIII.

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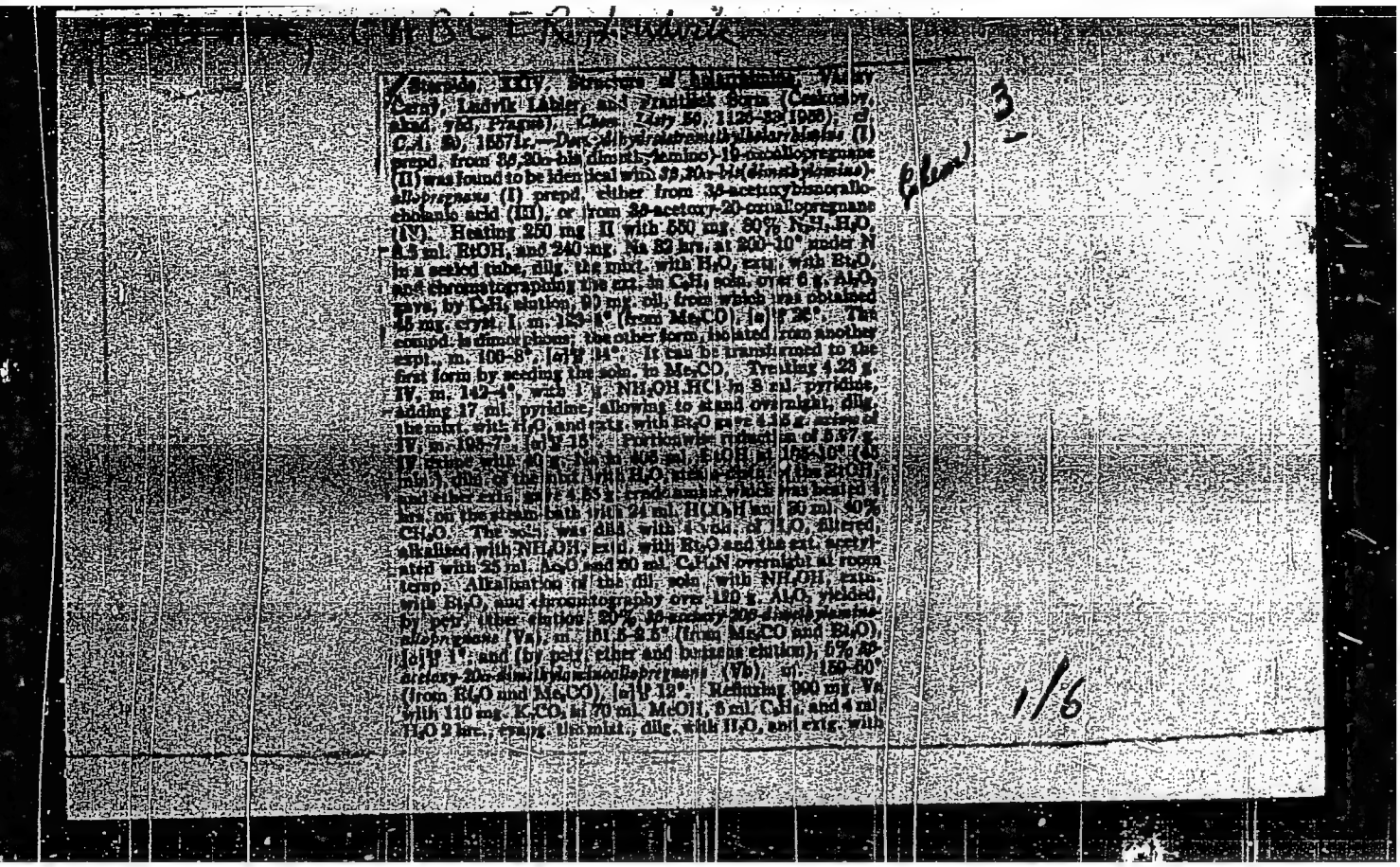
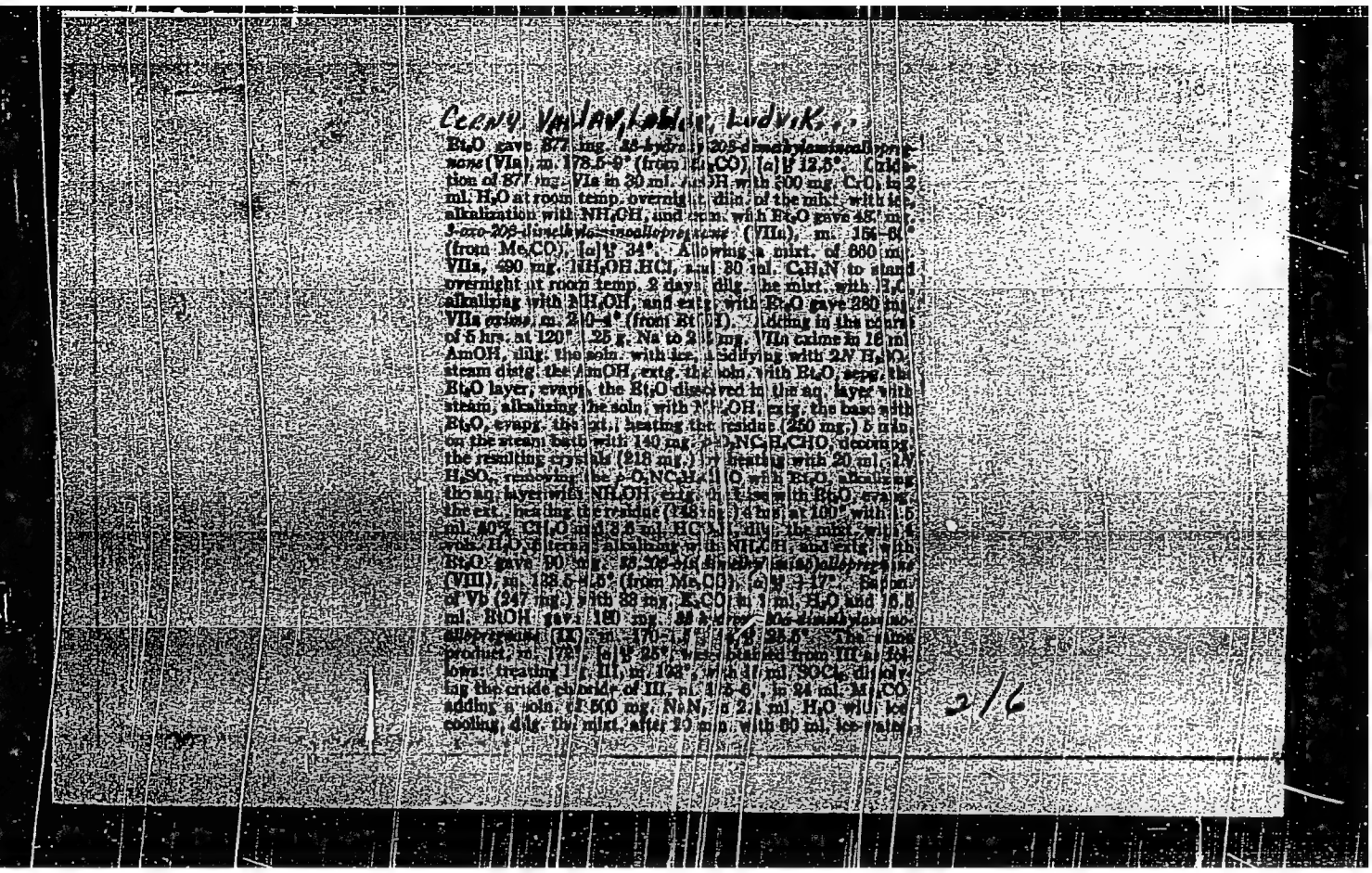


Steroids. XXIV. Structure of Allobufotalin. Walter Cerny, Ludwik Labler, and Vratislav Sorm (Czechoslov. akad. věd, Prague). *Chem. Listy* 50, 1125–32 (1956). *C.A.* 50, 15571c.—Dihydroxyallobufotalin (I) prepd. from 3β,20α-bis(dimethylamino)-16-oxoallopregnane (II) was found to be identical with 3β,20α-bis(dimethylamino)-allopregnane (I) prepd. either from 3β-acetoxybisnorallocholanic acid (III), or from 3β-acetoxy-20-oxoallopregnane (IV). Heating 250 mg. II with 550 mg. 80% N_2H_4, H_2O, 4.3 ml. EtOH, and 240 mg. Na 32 hrs. at 200–10° under N in a sealed tube, dild. the mixt. with H_2O, extd. with Et_2O, and chromatographed the ext. in C_6H_6 soln. over 6 g. Al_2O_3; 2% C_6H_6 elution, 90 mg. oil, from which was obtained 45 mg. cryst. I, m. 183–4° (from Me_2CO), $[\alpha]_D$ +26°. The second isomer, the other form, isolated from another expt., m. 100–8°, $[\alpha]_D$ 34°. It can be transformed to the first form by seeding the soln. in Me_2CO. Treating 4.23 g. IV, m. 142–4°, with 1 l. $NH_2OH.HCl$ in 3 ml. pyridine, adding 17 ml. pyridine, allowing to stand overnight, dild. the mixt. with H_2O, and extg. with Et_2O gave 4.15 g. oxime of IV, m. 198–7°, $[\alpha]_D$ 15. Portionwise reduction of 3.97 g. IV oxime with 40 g. Na in 405 ml. EtOH at 105–10° (45 min.), dild. of the mixt. with H_2O, removal of the EtOH, and ether extn. gave 4.85 g. crude amine which was heated 1 hr. on the steam bath with 24 ml. HCOOH and 20 ml. 40% CH_2O. The soln. was dild. with 4 vols. H_2O, filtered, alkalized with NH_4OH, extd. with Et_2O and the ext. acetylated with 25 ml. Ac_2O and 20 ml. C_5H_5N overnight at room temp. Alkalization of the dil. soln. with NH_4OH, extn. with Et_2O, and chromatography over 120 g. Al_2O_3 yielded, by petr. ether elution, 80% 3β-acetoxy-20-dimethylamino-allopregnane (Va), m. 101.5–2.5° (from Me_2CO and Et_2O), $[\alpha]_D$ 1°, and (by petr. ether and benzene elution) 6% 3β-acetoxy-20α-dimethylaminoallopregnane (Vb), m. 150–60° (from Et_2O and Me_2CO), $[\alpha]_D$ 12°. Refluxing 940 mg. Va with 110 mg. K_2CO_3 in 70 ml. MeOH, 5 ml. C_6H_6, and 4 ml. H_2O 2 hrs., evapg. the mixt., dilg. with H_2O, and extg. with



Cerny, Vaclav; Labler, Ludvik...

Et_2O gave 877 mg. *3β-hydroxy-20β-dimethylaminoallopregnane* (VIa), m. 178.5-9° (from Et_2CO), $[\alpha]_D$ 12.5°. Oxidation of 877 mg. VIa in 30 ml. AmOH with 500 mg. CrO_3 in 2 ml. H_2O at room temp. overnight, dilg. of the mixt. with ice, alkalization with NH_4OH, and extn. with Et_2O gave 457 mg. *3-oxo-20β-dimethylamino-allopregnane* (VIIa), m. 156-8° (from Me_2CO), $[\alpha]_D$ 34°. Allowing a mixt. of 680 mg. VIIa, 290 mg. $NH_2OH.HCl$, and 30 ml. C_5H_5N to stand overnight at room temp., 2 days, dilg. the mixt. with H_2O, alkalizing with NH_4OH, and extg. with Et_2O gave 280 mg. VIIa *oxime*, m. 240-4° (from EtOH). Heating in the course of 6 hrs. at 120° 25 g. Na in 2 l. AmOH with 1.5 g. VIIa oxime in 16 ml. AmOH, dilg. the soln. with ice, acidifying with 2*N* H_2SO_4, steam distg. the AmOH, extg. the soln. with Et_2O, evapg. the Et_2O layer, evapg. the Et_2O dissolved in the aq. layer with steam, alkalizing the soln. with NH_4OH, extg. the base with Et_2O, evapg. the ext., heating the residue (250 mg.) 5 min. on the steam bath with 140 mg. *p*-$NO_2NC_6H_4CHO$, decolorizing the resulting crystals (210 mg.) by heating with 20 ml. 2*N* H_2SO_4, removing the *p*-$O_2NC_6H_4CHO$ with Et_2O, alkalizing the aq. layer with NH_4OH, extg. the base with Et_2O, evapg. the ext., heating the residue (148 mg.) 4 hrs. at 100° with 1.5 ml. 40% CH_2O and 3.8 ml. HCl, dilg. the mixt. with 4 vols. H_2O, alkalizing with NH_4OH, and extg. with Et_2O gave 90 mg. *3β-hydroxy-20β-dimethylamino-allopregnane* (VIII), m. 128.5-9.5° (from Me_2CO), $[\alpha]_D$ -17°. Reduction of Vb (247 mg.) with 88 mg. K_2CO_3 in 1 ml. H_2O and 15 ml. EtOH gave 180 mg. *3β-hydroxy-20α-dimethylamino-allopregnane* (IX), m. 170-1.5°, $[\alpha]_D$ 28.5°. The ethiodide of IX, m. 178°, $[\alpha]_D$ 25°, was obtained from III as follows: treating 1 g. III, m. 123°, with 4 ml. $SOCl_2$, dissolving the crude chloride of III, m. 145-6°, in 24 ml. Me_2CO, adding a soln. of 500 mg. NaN_3 in 2.4 ml. H_2O with ice cooling, allg. the mixt. after 30 min. with 80 ml. ice-water,

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CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81782.

Author : Labler L., Cerny V.
Inst :
Title : Steroids. XXXIII. Holarredine, a New Alkaloid from the Bark of the Holarrhena Antidysenterica Wall.

Orig Pub: Chem. listy, 1957, 51, No 12, 2344-2350.

Abstract: By the investigation of holarremine $C_{21}H_{36}ON_2$ (I), the authors have developed a modified method for isolating alkaloids, by the help of which method it was possible to detect in the bark of Holarrhena antidysenterica in addition to I, N, N, N', N'-tetramethyl-I and conessin, a new alkaloid named

Card : 1/6

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 81782.

by the authors as holarredine $C_{?}H_{36}ON_{?}$ (II). II does not contain the N-methyl and the CH_3O - groups and it has one double bond. The bark (10 kg) was extracted twice with 30 liters of alcohol containing 3 liters of concentrated ammonia, the extract was acidified with 30% sulfuric acid in the presence of ice, it was condensed, washed with chloroform, and made alkaline with 20% NAOH, and the basic compounds were then extracted with ether. By the concentration 139 grams of crude bases were obtained, which were then agitated with one liter of petroleum ether for 8 hours. The insoluble part (A) was a powder-like compound weighing 31 grams. The solution after concentration gave 107 grams of oil (B). After 15 minutes of boiling

Card : 2/6

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81782.

with n-NC_6H_4CHO in alcohol, part A gave N,N'-bis-(p-nitrobenzylidine)-I, m.p. 275° C. (the mother liquor B) which upon boiling with 2N sulfuric acid and by boiling the separated product with alcohol gave the sulfate of I, m.p. 339° C. The base was separated by the action of ammonia, extracted with chloroform, afterwards with $HClO_4$ (from chloroform), precipitated with alkali and extracted with ether. Only 0.028% of I was obtained (calculated in respect to the dry bark), m.p. 185-186° C. (from ether), $[\alpha]_D^{20}$ -11° (c 3.9; chloroform) : monopicrate m.p. 240-242° C.; dipicrate $C_{??}H_{44}O_{14}N_4 \cdot H_2O$, m.p. 148-153° C.; the tetramethyl derivative was identical with the following compounds: O-benzoyl-N,N,N',N'-tetramethylhol-

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81782.

arrymine, m.p. 173-174° C.; O-acetyl-N, N, N', N'-tetramethylholarrymine, m.p. 139-140° C. by boiling for 2 hours with methanol solution of NaOH, gives the tetramethyl I. After concentration of the mother liquors B, the remainder was dissolved in chloroform, the base was separated with ammonia and was extracted with chloroform. With the help of cinnamic acid in alcohol, the salt was precipitated, from which the base was again separated by the action of ammonia, which base was again purified with the help of the salt of cinnamic acid. After separation by the action of ammonia, extraction with chloroform, concentration by evaporation and crystallization from a mixture of tetrahydrofuran - water, II was obtained, yield 0.026%,

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81782.

m.p. 181-182°C, [α]D -23°. The N, N, N'N'-tetramethyl-II $C_{24}H_{44}ON_2$, m.p. 163-164°C. [α]D -34 (c 1.97; chloroform) was synthesized by heating II with formic acid and formaldehyde on water bath for 4 hours. In the same way part B was methylated, the product was washed with acetone, mixed with petroleum ether and filtered by suction. After crystallization from alcohol, the insoluble part gave N, N, N', N'-tetramethyl-I, $C_{28}H_{44}ON_2$, m.p. 227-228°C. [α]D -34° (c 3.7; chloroform), yield 0.06%; the product is identical with the synthetic one. Conessine was obtained from the petroleum ether solution upon concentration and

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CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81782.

crystallization from acetone, m.p. 124-125°C., [illegible]
D + 26° (c 3.3; alcohol), yield 0.4%. Communication
XXXII, see R. Zh Khim., 1958, 64602.

Card : 6/6

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CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81783

Author : Cerny V., Labler L., Sorm F.
Inst :
Title : The Steroids XXXIV. The Structure of Holarrhedine

Orig Pub: Chem. listy, 1957, 51, No 12, 2351-2355.

Abstract: The authors have suggested a structural formula 3α, 20α-diamino-18-oxy-Δ^5-pregnen for holarrhydine (I) based on the results of thermal splitting and leading to the products which were identical with the products of the splitting of holarrhymine (II), based on the difference of corresponding desoxitetramethyl derivatives of I

Card : 1/4

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81783.

and II, and on the difference of the molecular rotation between I and II, which corresponds to the difference between 3β-amino-Δ^5-steroid and 3α-epimer. N, N, N', N'-tetramethyl holarrhymine (III) was allowed to stand in aqueous acetic acid and CrO_3 for 12 hours, and 3β, 20α-bis-dimethylamino-Δ^5-pregnenal-18 $C_{25}H_{42}ON_2$ separated, m.p. 141-143° C., $[\alpha]_D$ + 8°, which by heating for 3 hours with $N_2H_4 \cdot H_2O$ and KOH in triethylene glycol to 200-215° C. produced 3β, 20α-bis-dimethylamino-Δ^5-pregnen, m.p. 140-141° C., $[\alpha]_D$ -40°. In the same way from N, N, N', N'-tetramethyl-I (IV) was obtained 3α, 20α-bis-dimethylamino-Δ^5-pregnenal-18, m.p. 164-165° C., $[\alpha]_D$ + 12°,

Card : 2/4

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81783.

(c 2 7)., IR spectrum 1714, 2710 cm^{-1} From the later product was synthesized 3α, 20λ -dimethylamin-Δ^5-pregnen, m.p. 148-149°5 C., $[\alpha]_D$ - 31° (c 2.6). The thermal splitting of III and IV was carried out basically according to the same method: by heating with CH_3I in alcohol, with concentration, dissolving in water addition of Ag_2O, filtration concentration and heating for 7 minutes up to 195-200°C. The product was dissolved in ether, washed with water, and the ether layer was extracted with 5% HCl. From the ether layer was obtained $\Delta^{3,5}$-pregnedienoxide-18,20, $C_{21}H_{30}O$, m p. 97-98°C., $[\alpha]_D$ -150° (c 1.5). From the acidified part was obtained 18-oxy-20-α-dimethylamin-$\Delta^{3,5}$-pregnadien $C_{23}H_{30}ON$, m.p. 129-130 C.,

Card : 3/4

LABLER, L.; SORM, F.

Steroids. XLIV. 3β, 18-dihydroxy-5α-pregnane-20-one (18-20 cyclohemiketal) from nolarrhimine. In English. Coll. Cz. Chem. 24 no.9: 2975-2985 S '59. (EEAI 9:5)

1. Department of Natural Products, Institute of Chemistry, Czechoslovak Academy of Science, Prague.
(Steroids) (Dihydroxypregnanone) (Holarrhimine)

LABLER,L.; SORM,F.; ZERNY,V.

Steroids. XLVI. Partial synthesis of 3,3,20-trimethoxy-18,20-epoxy-5 α - pregnane from dihydroholarrhimine. XLVII. Partial synthesis of 18-benzoylamino-5 -pregnane-3 -OL-20-one from conessine. Coll Cz chem 25 no.12:4010-4021 '59. (EEAI 9:6)

1. Department of Natural Products, Institute of Chemistry, Czechoslovak Academy of Science, Prague.
(Steroids) (Methoxy group) (Holarrhimine)
(Epoxypregnane) (Amino group) (Pregnanone)
(Conessine) (Benzoyl group)

LABLER, L.; SORM, F.

Steroids. XLIII. Partial synthesis of 18-hydroxyprogesterone from holarrhimine. Coll Cz Chem 25 no.1:265-269 Ja '60. (EEAI 9:12)

1. Department of Natural Products, Institute of Chemistry, Czechoslovak Academy of Science, Prague.
(Steroids) (Hydroxyprogesterone) (Holarrhimine)

LABLER, L.; SORM, F.

Steroids. LIV. Some derivatives of (20R)-3β,20-dihydroxypregn-5-en-18-oic acid (18-20) lactone. Coll Cz Chem 25 no.11:2855-2862 N '60. (EEAI 10:6)

1. Institute of Organic Chemistry and Biochemistry Czechoslovak Academy of Science, Prague.
(Steroids) (Lactones)
(Dihydroxypregnenoic acid)

LABLER, L.

Steroids. LVI. An alternative route for preparation of (20R)-20-hydroxy-3-oxopregn-4-en-oic acid (18→20) lactone. Coll Cz Chem 26 no.3:724-729 Mr '61. (EEAI 10:9)

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Science, Prague.

(Hydroxyolopregnenoic acid) (Lactones) (Steroids)

CERNY, V.; JOSKA, J.; LABLER, L.

On steroids. LIX. Application of thin layer chromatography without binder for rapid analytical and preparative separation of steroids. Coll Cz chem 26 no.6:1658-1668 Je '61.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Science, Prague.

(Chromatography) (Steroids)

LABLER, L.

4

CZECHOSLOVAKIA

KASAL, A; POLAKOVA, A; KAMERNITZKY, A.V.; LABLER, L; CERNY, V.

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Science, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 5, 1963, pp 1189-1195

"On Steroids. LXXVI. N^3-Methylholarrhimine and N^{20}-Methylholarrhimine."

CZECHOSLOVAKIA

LABLER, L.

Institute of Organic Chemistry and Biochemistry of the Czechoslovak Academy of Sciences, Prague

Prague, Collection of Czechoslovak Chemical Communications, No 6, 1963, pp 1579-1583

"On Steroids. LXXVII. Some (20S)-5 Alpha-Pregnan-18,20-Oxides."

CZECHOSLOVAKIA

LABLER, L; HORA, J; CERNY, V.

Institute of Organic Chemistry and Biochemistry of the Czechoslovak Academy of Sciences, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 8, 1963, pp 2015-2020

"On Steroids. OXXIX. Synthesis of 3-alpha Dimethylamino-conan-5-ene. Corroboration of the Structure of Holarrhidine."

1/2

CZECHOSLOVAKIA

LABLER, L; SORM, F.

Institute of Organic Chemistry and Biochemistry of the Czechoslovak Academy of Sciences, Prague (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 9, 1963, pp 2345-2355

"On Steroids. LXXXI. The Structure of Concuressine and of Some Less Polar Alkaloids from Holarrhena antidysenterica Wall."

LABLER, L.

On steroids. Pt. 77. Coll Cz Chem 28 no.6:1579-1583 Je '63.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

LABLER, L.; HORA, J.; CERNY, V.

On steroids. Pt. 79. Coll Cz Chem 28 no.8:2015-2020 Ag '63.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

FAJKOS, J.; JOSKA, J.; PITHA, J.; SORM, F.; LABLER, L.

On steroids. Pts. Coll Cz Chem 28 no.9:2337-2355 S '63.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences. Prague.

LABLER,L.; CERNY,V.

On steroids. Pt 84. Coll Cz Chem 28 no.11:2932-2940 N'63.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

LABLER, L.

"Physical properties of the steroidal hormones" by L.L. Engel. Reviewed by L. Labler. Chem listy 58 no.10:1191-1192 O '64.

(3)

CZECHOSLOVAKIA

LABLER, L; SAMEK, Z; SMOLIKOVA, J; SORM, F

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 5, May 1966, pp 2034-2047

"On steroids. Part 97: Isolation and structure of some secondary formed weak bases from Holarrhena antidysenterica."

LABNO, B.

Instruction in flying. p. 301. (SKRZYDLATA POLSKA, Vol. 10, No. 19, May 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

LATSNO, L.

Distr: 4E3d

Pierwszy w Polsce Reaktor Jadrowy (The First Polish Nuclear Reactor), by L. Latno and K. Zarnowiecki; Warsaw, 1958, 106 pp

This booklet describes the construction and operation of the first nuclear reactor in Poland of Soviet production. It was built for experimental purposes, for scientific research, and for the production of artificial radioactive isotopes.

The reactor is of the tank type. It is immersed in a large aluminum tank filled with distilled water. The primary coolant is water and it is water-moderated. The fuel is 10% enriched uranium. The critical uranium weight is a few tens of kilograms. The fuel elements consist of thin tubular rods clad in aluminum. The rods are half a meter long and form a regular lattice of 17.5-mm spacing. The full charge consists of 800 rods containing 65 kg of uranium (hence 6.5 kg of U-235). For easier charging the rods are arranged in 52 clusters, suspended in aluminum matrices with 16 rods each. The clusters are set in a cage of aluminum, securing flow passage of the coolant between the rods. Nine holes run through the cage for control and safety rods. Around the core 8 isotope tunnels are built. In the core a neutron flux of $2 \cdot 10^{13}$ neutron/sec/cm^2 is produced; in the vicinity of the tunnels the flux is lower. But flux losses are not high, because the water inside the core serves also as reflector. Although the power of the reactor is only 2,000 kw, which is not much in comparison

L. Lazno and K. Zarnowiecki

with plutonium producing reactors, the neutron flux of 2.10^{13} is rather high. This paradox may be explained if we keep in mind that the whole power is released in a volume of 0.1 m^3.

Besides the vertical tunnels for isotope production, nine horizontal experimental channels surround the core radially. They permit the extraction of gamma radiation or neutrons from the core for experimental purposes. These channels are opened or closed by remote control. A tenth channel is a thermal column filled with graphite and intended to provide strong thermal neutron beams.

A water circulation system serves for heat removal from the core. The water heated in the core is sucked out by three pumps of 120 kw power and a flow rate of 1,000 m^3/hr. After passing heat exchangers the water is pumped back into the core. In the heat exchanger a second water loop cools the water. The second water loop is cooled in a barge tank.

The cooling loops keep the water in the core at a temperature of 35°C, while the surface of the fuel elements have a temperature of 90°C. Such a low temperature does not produce deterioration of the fuel elements. To avoid the contamination of water by impurities, the cooling systems, the tubes, the pumps, the exchangers, and valves are made of stainless steel containing about 20% chromium and 10% nickel. The structural material used in the core is aluminum, which is resistant to activation by neutrons.

27312

P/046/60/005/011/001/018
D249/D303

26.2244

AUTHORS: Łabno, Leszek, Dąbek, Wacław, and Byszewski, Witold

TITLE: Neutron sensitive boron-coated thermopile

PERIODICAL: Nukleonika, v. 5, no. 11, 1960, 685 - 688

TEXT: A description is given of a simple neutron flux detector developed in the Institute of Nuclear Research, of small dimensions, which consist of a thermopile with the alternate thermoelements coated with B. The detector is insensitive to γ-radiation or changes in the ambient temperature and operates by measuring the heat produced by neutron absorption in the B coating. The thermopile is constructed of 36 chromel-coppel thermoelements, spaced at 20 mm intervals, made of 1 mm wide and 0 02 mm thick strips and welded together under an inert atmosphere with the alternate junctions covered by 1 mm beads of B. The elements are supported on a ceramic base, the junctions being situated coaxially in 3 planes perpendicular to the axis of the thermopile, with equal nos. of coated and

Card 1/3

Neutron sensitive boron-coated ...

bare junctions in each plane. The whole assembly is placed in an Al sheath. Only the changes in ambient temperature which occur over ~10 seconds will affect the instrument, since the decay of the output thermoelectric power has been found to have a time constant of 8 secs. Response of the thermopile varies linearly with the power level of the reactor, (1×10^{11} mV/n. cm^2 sec), up to ~200 kW which corresponds to 10^{12} n/cm^2 sec. Sensitivity diminishes, thereafter, owing to the heating of uncoated junctions becoming, for example, 0.9×10^{-11} mV/n cm^2 at 2 MW (~10^{13} n/cm^2 sec). To test the instruments, neutron flux distribution in the 36/14 channel of the WWR-S reactor was measured by an absolute method using P and compared with the results given by the thermopile detector. Good agreement was obtained and the slight discrepancy is ascribed to the non-linearity of the thermopile. There are 3 figures and 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: G. Barbares, et al.: AECD - 2485; 1949, and AECD - 2975, 1950; T.R. Herold, Nucleoniks 13, no. 5, 64, 1955; T.A. Jaques, H.A. Ballinger, F. Wade,

Card 2/3

27312
S/046/60/005/011/001/018
D249/D303

Neutron sensitive boron-coated ...

Proc. IEE, 100, 110, 1953.

ASSOCIATION: Institute of Nuclear Research, Warsaw

SUBMITTED: July 1960

4

Card 3/3

27317
P/046/60/005/011/006/018
D249/D303

26.2223

AUTHORS: Byszewski, Witold, Aleksandrowicz, Jerzy, and Żabno, Leszek

TITLE: Temperature measurements of the WWR-S reactor fuel element wall

PERIODICAL: Nukleonika, v. 5, no. 11, 1960, 727 - 736

TEXT: A method of temperature measurement was developed using chromel-alumel thermocouples attached to the can of a fuel element. The temperature distribution along the fuel element were measured for a range of output power levels. The authors' aim was to investigate the possibility of increasing the power output of the reactor. The rather small dimensions of the fuel rod (10 mm diameter, 2 mm wall thickness) and a large temperature difference between the rod and the water added difficulty to setting up the measurements. Six symmetrical slots, 0.5 mm deep and 0.8 mm wide, were machined on the outside of the jacket to different lengths in order

Card 1/3

Temperature measurements of ...

to accomodate the thermocouples. The thermocouples were placed in thin aluminum tubes and pressed into the slots. It was essential to achieve a good thermal contact between the joints of the thermocouples and the aluminum jacket, and for this purpose a special method of soldering was developed, but it was discovered later that fastening with a thin aluminum wire proved more satisfactory. The performance of the arrangement was first tested on a dummy rod with heater placed inside the tube. Two series of measurements were performed inserting the modified fuel element with the attached thermocouples into two different channels of the reactor. The power output of the reactor varied from 0 to 2 kW and the temperatures registered by the six thermocouples were noted, as well as the water temperatures of the external cooling circuit. The measurements were performed at two rates of flow of the cooling water: 960 and 660 m^3/hour. It was shown that the temperature difference between the wall of the fuel element and the water is proportional to the power output of the reactor at a constant flow of water; a maximum value observed was 27.4°C, in disagreement with the calcu-

Card 2/3

27317

Temperature measurements of ... P/047/60/005/011/006/018
D249/D303

lated value of 50°C as supplied by the designers of the reactor. It is stated that in winter conditions the temperature of the jacket of the fuel element is well below the boiling point of water, but in hot weather there is not much room for increasing the output of the reactor. There are 10 figures and 2 tables.

ASSOCIATION: Instytut badań jądrowych, Warszawa, Oddział eksploatacji reaktora (Institute of Nuclear Research, Warsaw, Reactor Operation Division)

SUBMITTED: July, 1960

Card 3/3

ACCESSION NR: AP4011800 P/0053/63/000/012/0713/0716

AUTHOR: Labno, Leszek; Dabek, Waclaw; Kazimierski, Adam

TITLE: Thermoelectric neutron detector

SOURCE: Przeglad elektroniki, no. 12, 1963, 713-716

TOPIC TAGS: detector, neutron detector, thermoelectric neutron detector, thermoelement, thermoelectric couple, chromel-copel thermoelement, chromel-alumel thermoelement

ABSTRACT: The Polish Institute of Nuclear Research developed and tested a series of thermoelectric detector designs. One model was finally accepted on basis of experimental findings. It consists of 36 chromel-alumel thermoelectric couples which were stamped out of a strip about 0.02 mm thick and about 1 mm wide. The stability of chromel-copel couples was found to be inferior to that of chromel-alumel couples in the presence of a neutron flux. Their corrosion resistance is also inferior to the chromel-alumel couple. This detector produces a signal from 0.1 to 100 millivolts at a neutron flux from 10^{10} to 10^{13} neutrons/cm^2sec. The static characteristic was tested for this detector. Variations in the thermoelectric force of a detector containing 18 pairs of chromel-copel thermoelements as a function of reactor power

Card 1/2

ACCESSION NR: AP4011800

have a linear path up to a power of about 200 kilowatts, which corresponds to a neutron flux of about 10^{12} neutrons/cm^2sec at the point where the detector is inserted. The sensitivity of the detector is about 10^{-11} $\frac{\text{millivolt}}{\text{neutron/cm}^2\text{sec}}$ in this part of the characteristic. The detector's sensitivity diminishes with higher power owing to an increase of radiation effect during the heat transfer process between the boron-covered weld and housing. With a reactor power of 2 megawatts, which corresponds to a flux of about 10^{13} neutrons/cm^2sec, the sensitivity diminishes to about 0.9×10^{-11} $\frac{\text{millivolt}}{\text{neutron/cm}^2\text{sec}}$. Orig. art. has: 4 figures.

ASSOCIATION: Przemyslowy Instytut Elektroniki (Industrial electronics institute)

SUBMITTED: 00

SUB CODE: PH, GE

DATE ACQ: 10Feb64

NO REF SOV: 000

ENCL: 00

OTHER: 000

Card 2/2

LAENO, Tadeusz

Attempts at surgical treatment of Perthes disease. Chir. narzad. ruchu ortop. Pol. 30 no.2:171-176 '65.

1. Z Oddzialu Ortopedii Dziecicej Szpitala Wojewodzkiego w Bydgoszczy.

HUNGARY

KRAJCSOVICS, Pal, Jr, Dr; LABODA, Imre, Dr; ...as Hospital of Paszto, Medicine Department (Pasztoi Jarasi Korhaz, Belosztaly)

"Repeated Myocardial Infarct at Age 30."

Budapest, Orvosi Hetilap, Vol 104, No 1, 6 Jan 63, pages 24-25.

Abstract: [Authors' summary] The authors report on two myocardial infarct attacks of a 30 year old male patient. They call attention to the great increase of infarcts among young adults. They stress that in cases of combined complaints of a digestive and stenocardiac nature, myocardial infarct has to be considered in spite of indefinite laborat. findings in the beginning.

[11 Western, 4 Hungarian references]

L
1/1

KRAJCSOVICS, Pal, ifj. dr.; LABODA, Irma dr.

Repeated myocardial infarct in a 30-year-old patient. Orv. hetil. 104 no.1:24-25 6 Ja '63.

1. Pasztoi Jarasi Korhaz, Belosztaly.
(MYOCARDIAL INFARCT) (ALCOHOLISM)
(SMOKING)

L 34081-66 EWP(c)/EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(c) JD/JG
ACC NR: AP6025497 SOURCE CODE: HU/0012/66/000/003/0085/0088

53
B

AUTHOR: Laboda, Sandor--Laboda, Sh. (Graduate metallurgical engineer)

ORG: State Mint (Allami Penzvero)

TITLE: Applications of noble and common metals for temperature measurement

SOURCE: Meres es automatika, no. 3, 1966, 85-88

TOPIC TAGS: temperature measurement, thermocouple, platinum alloy, palladium alloy, rhodium alloy, rhenium containing alloy, osmium containing alloy, molybdenum containing alloy, tungsten containing alloy, gold alloy

ABSTRACT: The thermoelectrical properties of platinum/palladium-rhodium alloys with and without alloyants such as rhenium, osmium, molybdenum, tungsten, and gold were determined. The suitability of various combinations of concentrations for thermoelectric temperature determination was discussed on the basis of the data obtained. The thermal voltages recorded for the various specimens were presented. Thermocouples from noble elements outperformed consistently those from common metals. Orig. art. has: 5 figures and 2 tables. [JPRS: 36,646]

SUB CODE: 11, 09 / SUBM DATE: 21Jun65 / ORIG REF: 002 / OTH REF: 003

UDC: 546.5:536.5

Card 1/1

0916 0876

L 62718-65 EPF(c)/EWP(b)/EWA(d)/EWP(t) JD/WB HU/2502/64/042/003/0191/0205

ACCESSION NR: AT5021537

AUTHOR: Devay, J. (Devai, Y.) (Doctor); Szegedi, Robert (Segedi, R.); Labody, I. (Labodi, I.) 44,55

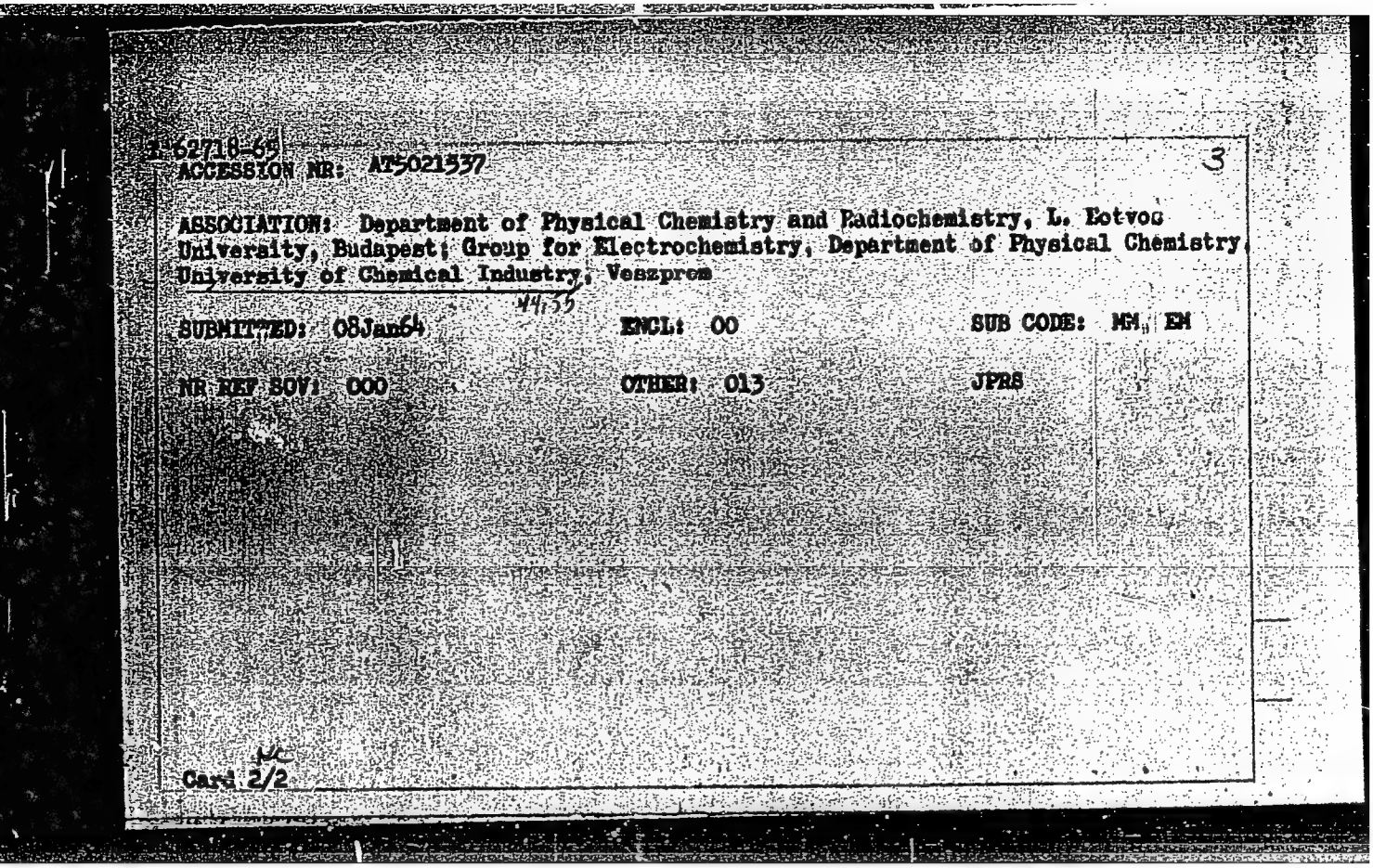
TITLE: Effect of alternating current on the electrolytic corrosion of steel. Part 1: Model measurements of the action of alternating current on the corrosion of steel

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 42, no. 3, 1964, 191-205

TOPIC TAGS: electrolysis, steel, metal surface, corrosion rate, corrosion, alternating current

ABSTRACT: Alternating current promotes the rate of steel surface corrosion, alters the corrosion caused by the activity of localized elements, and contributes to the development of surface corrosion phenomena by its non-homogeneous distribution. By means of model measuremnts it was established that the phenomena can be interpreted by the effect of the alternating current on polarization and on the rates of the electrode processes involved. Orig. art. has: 3 figures, 16 graphs.

Card 1/2



L 62718-65
ACCESSION NR: AT5021537 3

ASSOCIATION: Department of Physical Chemistry and Radiochemistry, L. Eotvos University, Budapest; Group for Electrochemistry, Department of Physical Chemistry, University of Chemical Industry, Veszprem

SUBMITTED: 08Jan64 ENCL: 00 SUB CODE: MM, EM

NR REF SOV: 000 OTHER: 013 JPRS

Card 2/2

L 62719-65 EPF(c)/EWP(b)/EWA(d)/EWP(t) JD/WB
ACCESSION NR: AT5021538 HU/2502/64/042/003/0207/0226

AUTHOR: Devay, Jozsef (Deval, Y.)(Doctor); Szegedi, Robert (Segedi, R); Labody, I. (Laboci, I.)

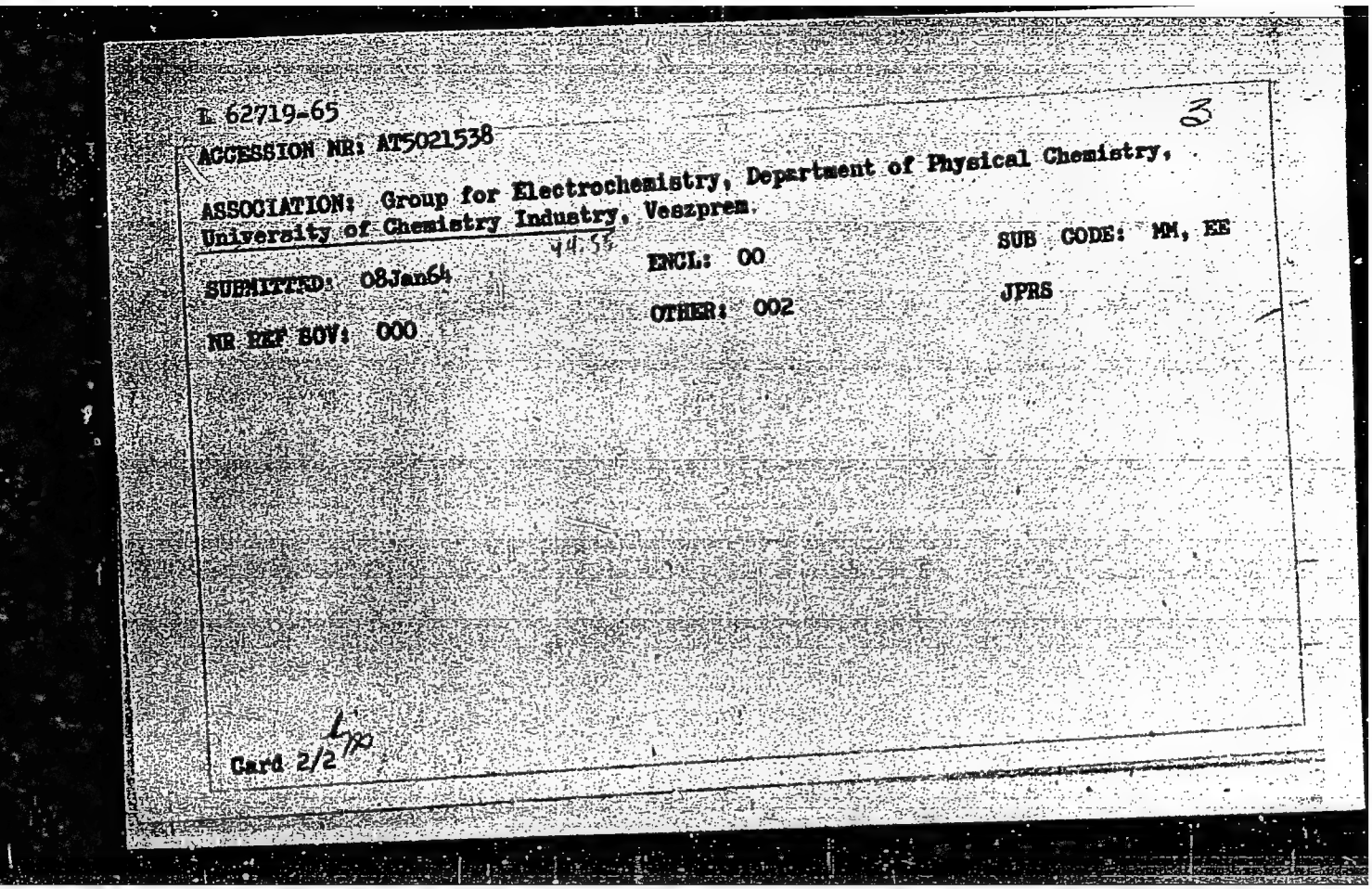
TITLE: Effect of alternating current on the electrolytic corrosion of steel. Part 2: Laboratory measurements of corrosion affected by alternating current

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 42, no.3, 1964,207-226

TOPIC TAGS: alternating current, steel, metal surface, corrosion, pipe

ABSTRACT: Laboratory measurements conducted on steel rods confirmed the general findings reported in part 1 of this series (Acta Chimica Academiae Scientiarum Hungaricae, Vol 42, no 3, Dec 1964, pp191-206; same issue, preceding article) on the basis of model experiments. It was assumed that the corrosive effect of the alternating current on the homogeneous metal surface and on the local elements is combined with the corrosion effect caused by the non-homogeneous distribution of the alternating current. Orig. art. has: 4 formulae, 1 table, 11 graphs, 9 figures.

Cards 1/2



L 62719-65

ACCESSION NR: AT5021538

ASSOCIATION: Group for Electrochemistry, Department of Physical Chemistry, University of Chemistry Industry, Veszprem.

SUBMITTED: 08Jan64 ENCL: 00 SUB CODE: MM, EE

NR REF SOV: 000 OTHER: 002 JPRS

Card 2/2

LABOHY, Ladislav, MUDr; PICK, Jaroslav, MUDr

Acute allergic myocarditis after vaccination against scarlet fever. Cas.lek.cesk. 91 no.12:363-368 21 Mar 52.

1. Z interniho oddel. statni oblastni nemocnice v Havlickove Brode. Prednosta: MUDr L.Labohy. Z interniho ambulatoria OMP v Chotebori. Prednosta: MUDr J. Pick.

(MYOCARDITIS,
allergic, after vacc. against scarlet fever)
(SCARLET FEVER, prevention and control,
vacc., causing allergic myocarditis)
(VACCINES AND VACCINATIONS,
scarlet fever, causing allergic myocarditic)
(ALLERGY,
myocarditis after vacc. against scarlet fever)

LABOHY, LADISLAV

CYRANY, Vaclav, MUDr.; LABOHY, Ladislav, MUDr.; REJF, Milan, MUDr.

Neurilemmoma ventriculi multiplex. Rozhl. chir. 35 no.3:153-157 Mar 56.

1. Z chirurgickeho odd. (primar Dr P. Trnka, nositel Radu prace) a z interniho odd. (primar Dr L. Labohy) nemocnice Havlickuv Brod.

(STOMACH NEOPLASMS, case report
multiple neurilemmoma of anterior wall (Cz))
(NEURILEMMOMA, case report
multiple of anterior wall of stomach (Cz))

3

CZECHOSLOVAKIA

HOSLAN, J., MD; LABOHY, L., MD; ZITA, C., MD

Internal Medicine Ward of the Hospital (Vnitrni oddeleni nemocnice), Prague (for all)

Prague, Prakticky lekar, No 11, 1963, pp 418-419

"General Principals in Treatment of Green Mushroom Poisoning - Amanita phalloides."

LEBOK, D.M.

Prolonged anesthesia in traumatology and orthopedics. Khirurgiia, Moskva no.3:12-15 Mar 1952. (CLML 22:1)

1. Professor. 2. Of the Central Institute of Traumatology and Orthopedics of the Ministry of Public Health USSR (Director -- Prof. N. N. Priorov), Corresponding Member Ams USSR).

LABOK, D.M., prof.

Results of treating spine fractures. Zdrav. Turk. 7 no.11: 11-13 N'63 (MIRA 17:3)

1. Iz kafedry khirurgii, travmatologii i ortopedii fakul'teta usovershenstvovaniya vrachey (zav. - prof. D.M. Labok) Turkmenskogo gosudarstvennogo meditsinskogo instituta.

LOKSHIN, Sh.Z.; LABOK, L.Yu.

Displacement of an elastic half plane under the effect of forces at the end distance from the edge. Trudy LKI no.38:109-115 '62.
(MIRA 16:7)

1. Kafedra stroitel'noy mekhaniki korablya Leningradskogo korablestroitel'nogo instituta.
(Deformations (Mechanics))

LABOK, O.P., inzhener.

Simple automatic redlosing group circuit for 6 kv.lines. Elek. stz. 28 no.1:85-86 Ja '57. (MLRA 10:3)
(Electric circuit breakers)

LABOK, P.

"Labor statistics in industry and construction" by M.V.Daragan, N.V.Rutkovskaia, B.B.Bronshtein; "Studies on labor statistics" by IA.D.Kats. Reviewed by P.Labok. Sots. trud 6 no.4:151-154 Ap '61. (MIRA 16:7)

(Labor and laboring classes—Statistics)
(Daragan, M.V.) (Rutkovskaia, N.V.) (Bronshtein, B.B.) (Kats, IA.D.)

LABOK, S., vrach; SYROVADKO, O., vrach.

Labor hygiene in a chemical plant. Sov. profsoiuzy 20 no.1:48 Ja '64. (MIRA 17:2)

LABOK, S. I.

PA 49/49T61

USSR/Medicine-Industry and Occupation, [illegible] Oct 48
Hygiene
Medicine-Metallic Mercury, Effect of

"Medical Instructions for Laborers Working With Metallic Mercury," S.I. Labok, Inst of Labor Hygiene and Occupational Diseases, Acad Med Sci USSR, 3½ pp

"Fiz i San" No 10

Observation showed that carefully planned instructions for new laborers in medico-technical training room of "Kochizmeritel's" Factory acquaint them with the dangerous nature of the material with which they will come in contact. Obtained successful results in the control of mercury intoxication with

49/49T61

USSR/Medicine-Industry and Occupation, Oct 48
Hygiene (Contd)

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Includes three illustrations.

49/49T61

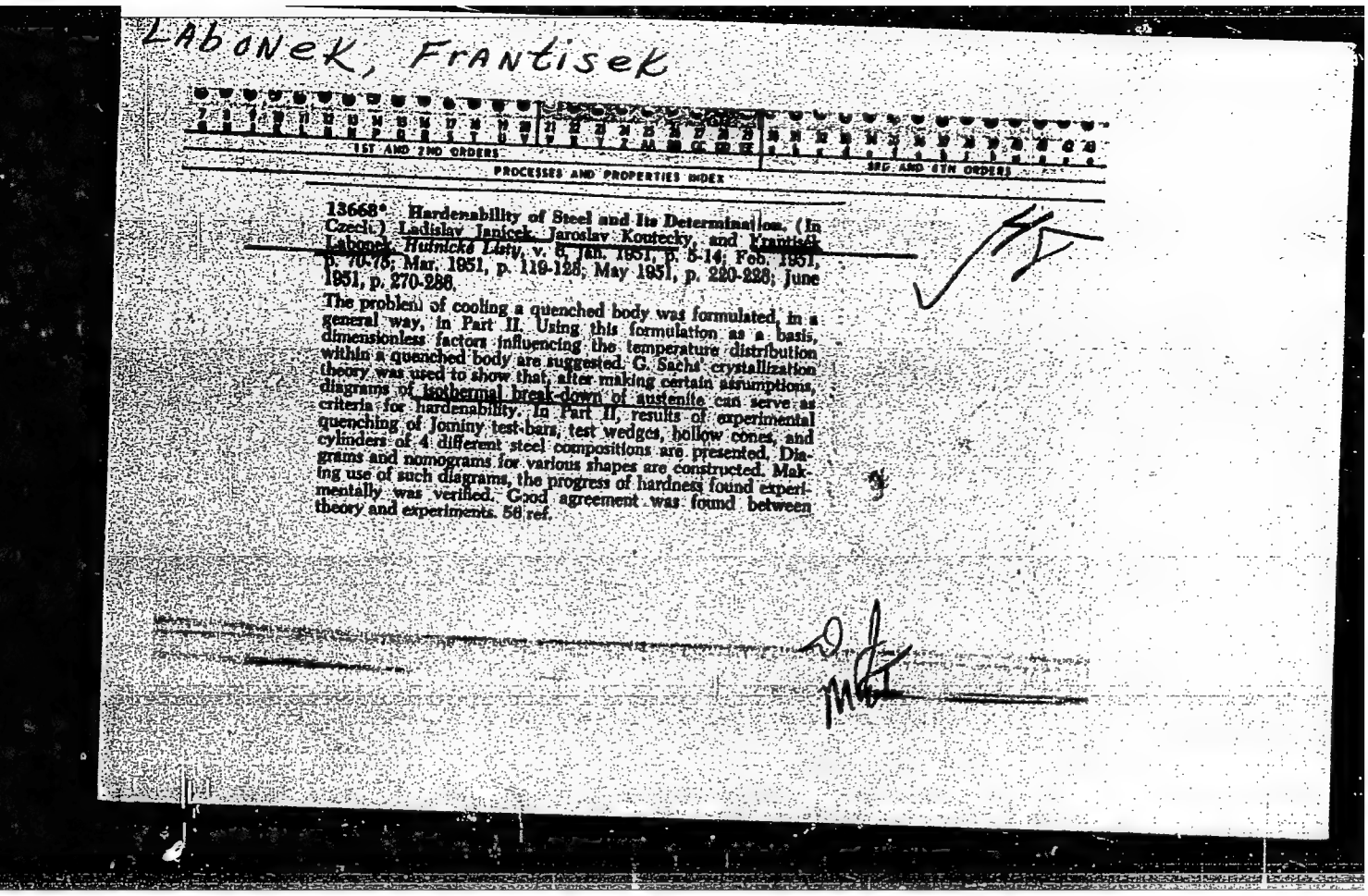
LABOK, Z.L.

4544 LABOK, Z.L. i KOVALEV, YE. S. Rekonstruktsiya vrashchayushchikhsya pechey na podel'skom tsementnom. zovade. m., promstroyizday, 1954. s. s chert.; 3 L. chert. 20 sm. (novatory prom-sti stroit. materialov). 2.000 ekz. 1 r. 20 k. (55-158) p

666.94.041-77

KAVALENKO, K.A.-ustroystvo dlya mekhanicheskoy podachi dosok na tsirkul'nuyu pil.-(t. b. monesova. mekharizm dlya vyrabotki steklyannykh ugol'nikov).- sm 4557

SO: Knizhnaya Letopis', Vol. 1, 1956



LABONEK, FRANTISEK

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

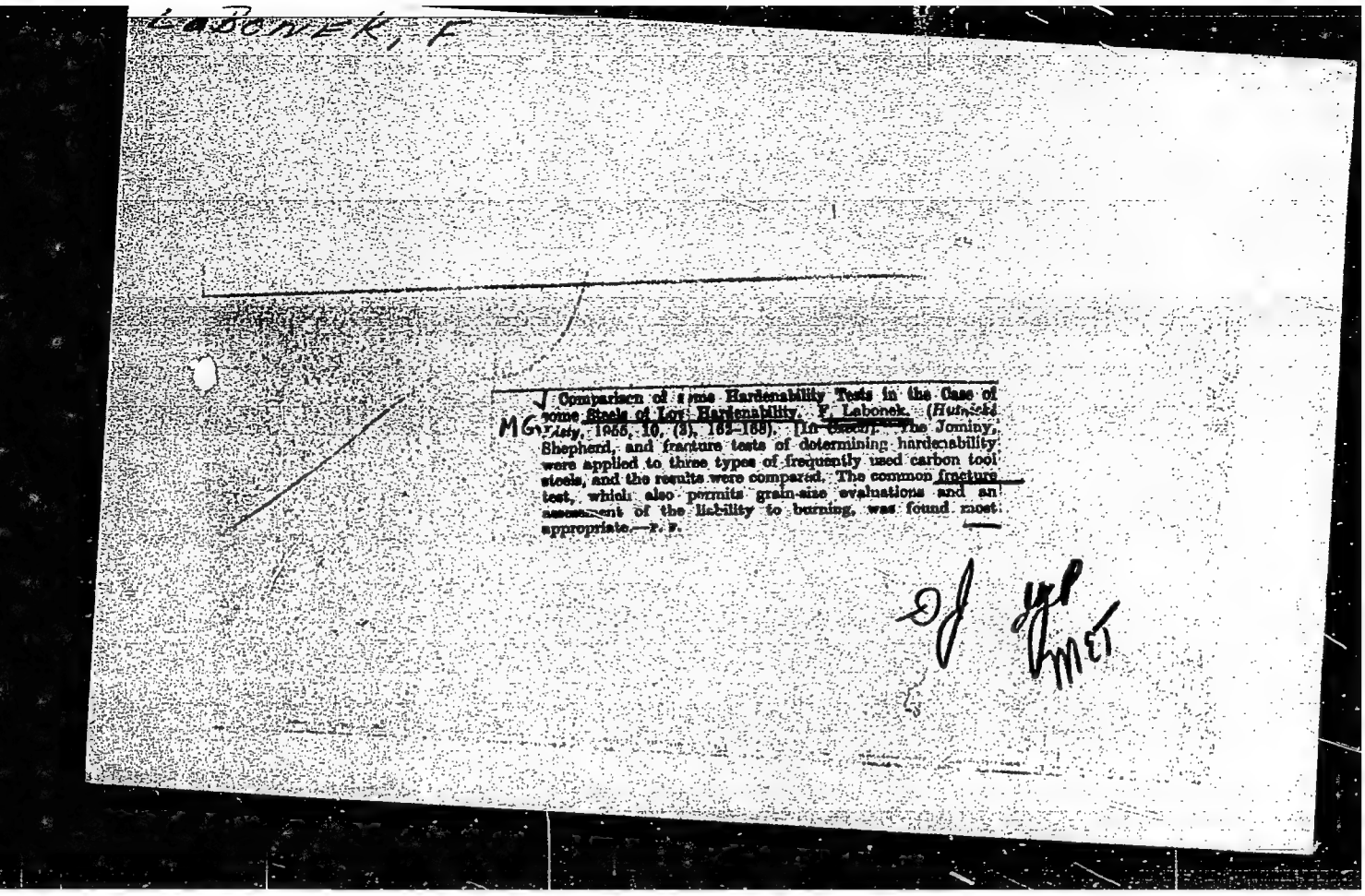
3RD AND 4TH ORDERS

13668* Hardenability of Steel and Its Determination. (In Czech.) Ladislav Janicek, Jaroslav Koutecky, and Frantisek Labonek. *Hutnicke Listy*, v. 6, Jan. 1951, p. 5-14; Feb. 1951, p. 70-75; Mar. 1951, p. 119-128; May 1951, p. 220-228; June 1951, p. 270-288.

The problem of cooling a quenched body was formulated, in a general way, in Part II. Using this formulation as a basis, dimensionless factors influencing the temperature distribution within a quenched body are suggested. G. Sachs' crystallization theory was used to show that, after making certain assumptions, diagrams of isothermal break-down of austenite can serve as criteria for hardenability. In Part II, results of experimental quenching of Jominy test-bars, test wedges, hollow cones, and cylinders of 4 different steel compositions are presented. Diagrams and nomograms for various shapes are constructed. Making use of such diagrams, the progress of hardness found experimentally was verified. Good agreement was found between theory and experiments. 56 ref.

10108 Comparison of Various Methods of Determining Austenitic Grain Sizes in Steel. (Czech.) F. Labounek and L. Jenicek. *Hutnicke Listy*, v. 7, Apr. 1952, p. 171-178.

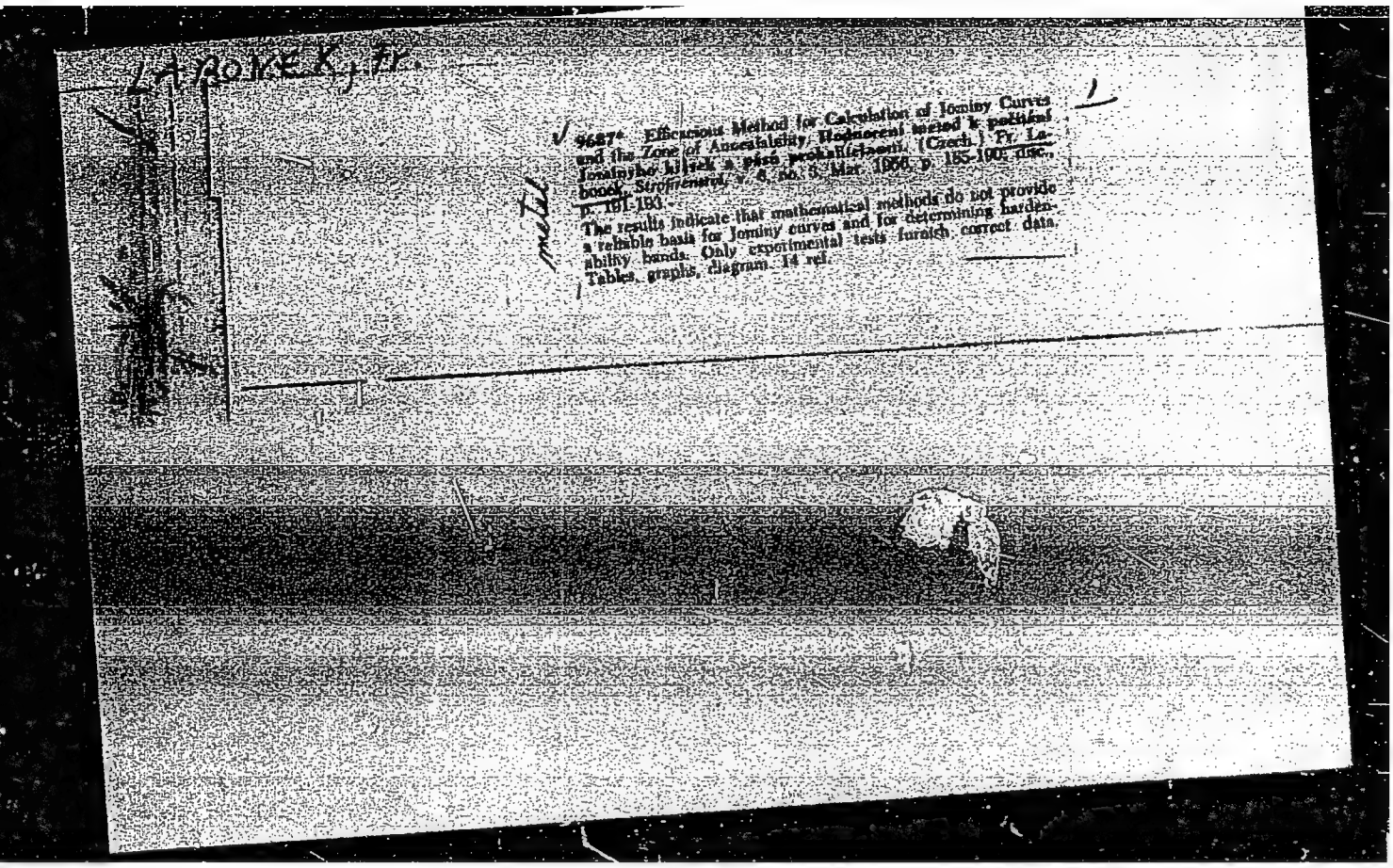
Presents a detailed discussion of the above. The "fracture grain size" method is recommended for general use, the Gerasimenko and Cu-diffusion methods should be used only for quality control, and the McQuaid-Ehn method should be used only for carburizing steels. 92 ref.



LABONEK, F

MG

Comparison of some Hardenability Tests in the Case of some Steels of Low Hardenability. F. Labonek. (*Hutnicke Listy*, 1955, 10, (3), 162–169). [In Czech]. The Jominy, Shepherd, and fracture tests of determining hardenability were applied to three types of frequently used carbon tool steels, and the results were compared. The common fracture test, which also permits grain-size evaluations and an assessment of the liability to burning, was found most appropriate.—P. P.



9687* Efficacious Method for Calculation of Jominy Curves and the Zone of Ascertainability. Hodnocení metod k počítání Jominyho křivek a pásů prokalitelnosti. (Czech.) Fr. Labounek. *Strojírenství*, v. 6, no. 5, May 1956, p. 185-190; disc., p. 191-193.

The results indicate that mathematical methods do not provide a reliable basis for Jominy curves and for determining hardenability bands. Only experimental tests furnish correct data. Tables, graphs, diagram. 14 ref.

LABONEK, Frantisek, inz., dr.

Improved method of annealing the antifraiction bearing steel with regard to the content of the Ni, cu and Mn. Hut listy 16 no.7:471-475 Jl '61.

1. Spojene ocelarny, narodni podnik, Kladno.

LABONEK, Frantisek, dr., inz.

Effect of nickel and copper on the transformation temperature, hardenability and quantity of residual austenite after hardening of the steel to be used for antifriction bearings. Hut listy 17 no.8:543-548 Ag '62.

1. Spojene ocelarny, narodni podnik, Kladno.

L 18505-66 EWA(d)/EWP(t) JD

ACC NR: AP6010252 SOURCE CODE: CZ/0034/65/000/003/0190/0194

AUTHOR: Labonek, Frantisek (Engineer; Doctor; Doctor of sciences)

ORG: SONP, Kladno

TITLE: Conditions for the globular pearlite formation in the annealing of hypereutectoid steels with particular reference to antifriction bearing steels

SOURCE: Hutnicke listy, no. 3, 1965, 190-194

TOPIC TAGS: pearlite, annealing, hypereutectoid steel, carbon steel, antifriction metal, bearing steel, austenite, carbide

ABSTRACT: The mechanism of kinetics of the pearlite transformation in hypereutectoid carbon steels is described. Formation of the lamellar pearlite, and of the globular pearlite are discussed. A model of the lamellar pearlite formation is described, as well as the model for the intrinsic globular pearlite formation. The shape of the original nucleus determines the final structure of the pearlitic transformation. Conditions for the formation of a definite nucleus type (oriented lamellar or globular) result from the initial structure condition that is by the

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L 18505-66
ACC NR: AP601052

homogeneity of the austenite, and the amount of globular carbides. High annealing temperatures, quicker cooling after annealing, and long annealing periods favor lamellar structure. Presence of Cr, Ni, and Cu slow down lamellar structure formation. Results of an experiment of 1000 hours are given. Orig. art. has: 5 figures. [JPRS]

SUB CODE: 11,13 / SUB DATE: none / ORIG REF: 006 / OTH REF: 013 / SOV REF: 008

Card 2/2 RC

UDC: 669.112.227.322.1: 669.14.018.251

L 26045-66 T/EWP(t) IJP(c) JD/HW/DJ

ACC NR: AP5025474 SOURCE CODE: CZ/0065/65/000/004/0333/0360

AUTHOR: Labonek, Frantisek — Labonek, Frantishek

ORG: State-Owned United Steel Works, Kladno (Spojene ocelarny, nar. podnik)

TITLE: Effect of nickel and copper on reactions occurring during annealing of steel for anti-friction bearings

SOURCE: Kovove materialy, no. 4, 1965, 333-360

TOPIC TAGS: annealing, steel, nickel, ~~[illegible]~~, copper, ~~[illegible]~~, carbide phase, ~~metallography~~, pearlite steel, austenite, metal analysis, antifriction bearing

ABSTRACT: The behavior of the carbide phase was studied during exposure of steel to annealing temperatures, during cooling of steel until austenite is converted into pearlite, and during further slow cooling. Four melts containing 1% C, 1.6% Cr, and various amounts of Ni and Cu (0.19 - 1.14%) were heated to 760 ± 20C, held at this temperature for 4 hours, cooled in the furnace to <650C at a rate of 10 ± 5C and then in air. The behavior of the carbide phase (changes in the total volume and surface of the carbide phase and their distances, the process of

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L 26045-66

ACC NR: AP5025474

pearlite transformation resulting in the formation of spheroidite) was studied by the quantitative metallographic method. The rate of dissolving the carbide phase and the decrease and growth of carbides were determined. The corresponding energy of the diffusion activation (Q) was determined for a steel containing 0.56% Ni+Cu, where Q = 30,500 cal/g atom. The diffusion rate characterized by the diffusion coefficient (D) was determined as $D = A \cdot e^{-\frac{Q}{RT}}$; where A is a material constant independent of the temperature, R is the gas constant equal to 1.987 cal/g atom, and T is the absolute temperature. The presence of Ni and Cu in steels affected all stages of annealing, and an increase in the amount of Ni and Cu decelerated the processes which occurred during annealing. The presence of Ni and Cu in the amounts studied did not affect the diffusion of C in austenite, but slowed down the diffusion of Cr. This effect increased with an increased amount of Ni and Cu, reflected in a moderate increase in the working process necessary for the formation of nuclei of the carbide phase. During pearlite transformation, the presence of Ni and Cu dissolved in austenite affected both the diffusion, necessary for the distribution of alloy elements (Cr), and a decrease in the rate of the polymorphic transformation $\gamma \rightarrow \alpha$. Together with the Cr, the Ni and Cu increased the working process necessary for the formation of nuclei and the energy of activation of the process. Orig. art. has: 18 formulas, 9 fig. and 6 tables.

SUB CODE: 11/3/ SUBM DATE: 13Jul64/ ORIG REF: 006/ SOV REF: 013/ OTH REF: 008

Card2/2

L 26045-66 T/EWP(t) IJP(c) JD/HW/DJ

ACC NR: AP5025474 SOURCE CODE: CZ/0065/65/000/004/0333/0360

AUTHOR: Labonek, Frantisek -- Labonek, Frantishek

ORG: State-Owned United Steel Works, Kladno (Spojene ocelarny, nar. podnik)

TITLE: Effect of nickel and copper on reactions occurring during annealing of steel for anti-friction bearings

SOURCE: Kovove materialy, no. 4, 1965, 333-360

TOPIC TAGS: annealing, steel, nickel, copper, carbide phase, pearlite steel, austenite, metal analysis, antifriction bearing

ABSTRACT: The behavior of the carbide phase was studied during exposure of steel to annealing temperatures, during cooling of steel until austenite is converted into pearlite, and during further slow cooling. Four melts containing 1% C, 1.6% Cr, and various amounts of Ni and Cu (0.19 - 1.14%) were heated to 760 ± 20C, held at this temperature for 4 hours, cooled in the furnace to <650C at a rate of 10 ± 5C and then in air. The behavior of the carbide phase (changes in the total volume and surface of the carbide phase and their distances, the process of

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L 26045-66

ACC NR: AP5025474

pearlite transformation resulting in the formation of spheroidite) was studied by the quantitative metallographic method. The rate of dissolving the carbide phase and the decrease and growth of carbides were determined. The corresponding energy of the diffusion activation (Q) was determined for a steel containing 0.56% Ni+Cu, where Q = 30,500 cal/g atom. The diffusion rate characterized by the diffusion coefficient (D) was determined as $D = A \cdot e^{-\frac{Q}{RT}}$; where A is a material constant independent of the temperature, R is the gas constant equal to 1.987 cal/g atom, and T is the absolute temperature. The presence of Ni and Cu in steels affected all stages of annealing, and an increase in the amount of Ni and Cu decelerated the processes which occurred during annealing. The presence of Ni and Cu in the amounts studied did not affect the diffusion of C in austenite, but slowed down the diffusion of Cr. This effect increased with an increased amount of Ni and Cu, reflected in a moderate increase in the working process necessary for the formation of nuclei of the carbide phase. During pearlite transformation, the presence of Ni and Cu dissolved in austenite affected both the diffusion, necessary for the distribution of alloy elements (Cr), and a decrease in the rate of the polymorphic transformation $\gamma \rightarrow \alpha$. Together with the Cr, the Ni and Cu increased the working process necessary for the formation of nuclei and the energy of activation of the process. Orig. art. has: 18 formulas, 9 fig. and 6 tables.

SUB CODE: 11/3/ SUBM DATE: 13Jul64/ ORIG REF: 006/ SOV REF: 013/ OTH REF: 008

Card2/2

FEHER, Otto; LABOR, Elemer; MOZSIK, Gyula; SZABO, Tibor

Effect of d-tubocurarine, nicotine and some tropane derivatives on the ganglionic stimulation transmission. Acta physiol Hung 20 no.2:177-186 '61.

1. Orvostudomanyi Egyetem Elettani Intezete, Debrecen.

LABORSKIY, K.P. (Moskva); ROZENTAL', A.L. (Moskva) EGLIT, A. Kh. (Moskva)

Natural gas in reduction reactions of iron ores in a fluidized bed. Izv. AN. SSSR. Otd. tekh. nauk. Met. i topl. no.2:13-19 Mr-Ap '61. (MIRA 14:4)

(Iron--Metallurgy) (Fluidization)
(Gas, Natural)

FEHER, O.; LABOS, E.; MOZSIK, Gy.; SZABO, T.

Effect of d-tubocurarine, nicotine and individual tropane compounds on the ganglionic transfer of excitation. Acta Physiol. Acad. Sci. Hung. 20 no.2:177-186 '61.

1. Physiologisches Institut der Medizinischen Universitat, Debrecen.

(CURARE pharmacol) (NICOTINE pharmacol)
(ATROPINE rel cpds) (GANGLIA AUTONOMIC pharmacol)